C2000W Mobile Data Terminal User Manual

Dear customers:

Thank you for choosing our products, we will try our best to provide you with the comprehensive and thoughtful service and technical support. The user manual has introduced the detailed configurations and operations of the portable terminal. Before operating, please read the specifications carefully.

Welcome to feedback us your concerns, perspectives and suggestions, we will be glad to answer and reply to you.

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● Chapter 1 Product Introduction

C2000W terminal handheld with its smart appearance, rugged structure, easy portability, barcode and RFID tags reading, can satisfy different users with different application environments.

C2000W handheld has ideal advantages of fast reading speed and high recognition rate by using Symbol SE955/SE4500 high-performance scanning engine. It supports screen touch operation by using Wince 6.0 OS, and increases the work and long standby time effectively by using the 3200mAh high-capacity lithium battery.

1.1 Technical Parameters

Physical Parameters	
Dimensions	148mm*67mm*31mm
Weight	<250g (including the battery)
Screen	2.8″QVGA TFT-LCD, 65K colors, backlight
Keyboard	21 silica gel numeric keys
Battery	3.7V, 3200mAh, rechargeable li-ion polymer battery
Expansion Slot	MicroSD/TF, maximum capacity of 8G
SIM Slot	one SIM card
Audio	0.5W wat
Camera	Samsung 3.2 mega pixels
Performance Parameters	
CPU	Samsung ARM920T，533MHz
OS	Windows CE 6.0
Memory	128MB RAM + 512MB NAND FLASH

Interface	USB 2.0 Client
Storage Card Type	MicroSD card
Maximum Expansion Storage	32GB
Environmental Parameters	
Operating Temperature	-20℃ to 50℃
Storage Temperature	-20℃ to 70℃
Humidity	5%RH-95%RH（non-condensing）
Dropping Survive	Withstands 1.2m dropping to concrete (six sides)
Sealing	IP54
Wireless Communication	
WAN	GSM/GPRS/EDGE(850,900,1800,1900MHz), speed 85.61/42.8bps
WLAN	WiFi IEEE 802.11 b/g
WPAN	Bluetooth 2.0
Data Collection	
Barcode	1D barcode（Symbol SE955, laser, hardware decoding）: UPC/EAN, Code128, Code39, Code93, Code11, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, Codabar, MSI, RSS, ect 2D barcode（Symbol SE4500，COMS, software decoding）: Data Matrix, QR Code, Aztec Code, PDF417, US Planet, UK Postal, ect.

RFID	HF 13.56MHz, ISO14443A/ISO15693（optional）
Developing Environment	
SDK	Chainway SDK
Programming Language	C++/C#/VB.Net
Developing Tool	Visual Studio 2005 / Visual Studio 2008

1.2 Accessories

Title	Piece	Note	Picture
Power Adapter	1	Charging the battery	
USB cable	1	Synchronizing with the PC, charging the battery	
Stylus	1	Operating the screen touch	
Battery	1	3200mAh high- capacity lithium battery	

● Chapter 2 Getting Started

2.1 Introduction

Please refer to <C2000W User Manual> which introduces the functional characteristic, battery installation, SD card installation, SIM card installation, charging, barcode reading, and RFID tags reading, ect.

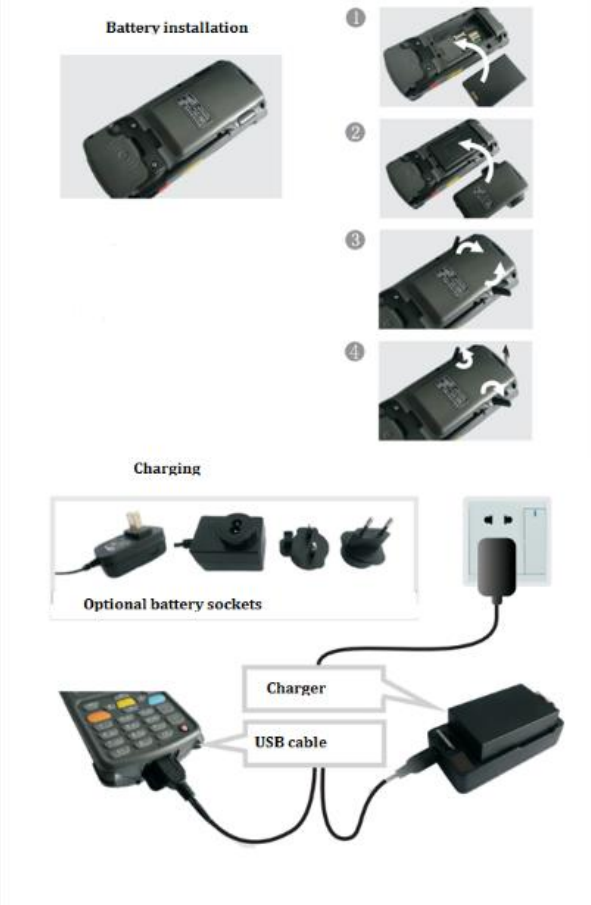
2.1.1 Functional characteristic：Pic 2.1-1

1	F7
2	F9
3	F8
4	F10
5	F11
6	F12
7	Punctuation/Number swtich key
8	Speaker
9	Scan buttom
10	Alpha/Number switch key
11	Power switch
12	Camera
13	RFID
14	Scanning Engine
15	USB port

2.1.2 Installation：Pic 2.1-2

Pic 2.1-2

2.1.3 **Charging:** Pic 2.1-3



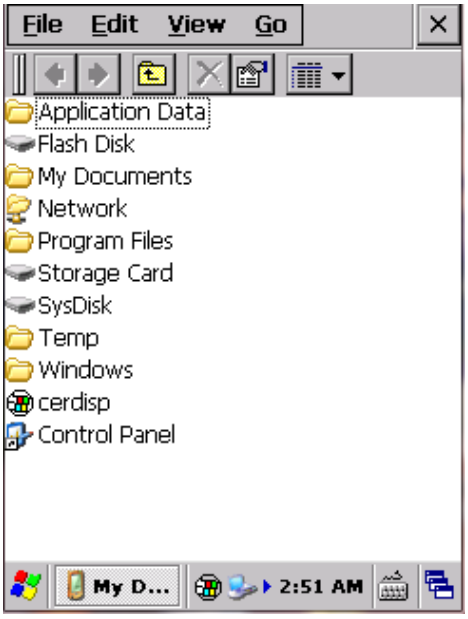
Pic 2.1-4

2.1.4 **Scanning:** Pic 2.1-5

Pic 2.1-5

2.2 TF card

After installing the SD card successfully, we can see an icon named “Storage Card” when open “My Device”. You can open it to get the files stored. Pic 2.2-1



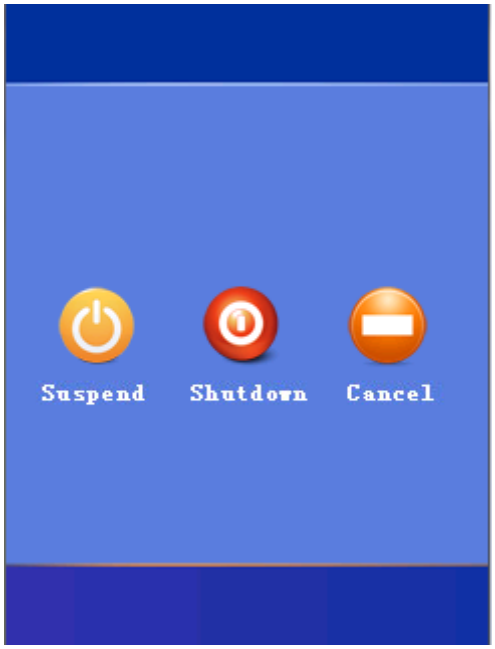
Pic 2.2-1

2.3 Stand-by and Wake-up

2.3.1 Suspend

We can save the power by pressing once lightly to set the device into the status of suspend, then in the new interface, there would be three options including suspend, shutdown and cancel, and choose 'Suspend'.

The device will enter the status of stand-by automatically once there is no operation for a long time when it is powered on, in order that it can save the power. Please refer to Pic 3.4 for detailed parameters. Pic 2.3-1



Pic 2.3-1

2.3.2 Wake-up

Press once lightly to wake up the device immediately when it is in the status of stand-by in order that we can operate it normally.

2.3.3 Power on

For device being powered off, press once lightly, then it will boot and enter the system after a few seconds.

2.3.4 Power off

For device being powered on, press tightly, then in the new interface, there would be three options including suspend, shutdown and cancel, and choose 'Shutdown'. Pic 2.3-2

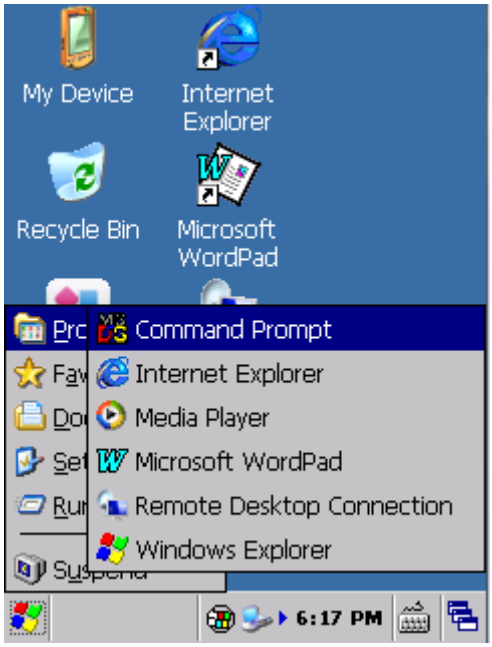
Pic 2.3-2

Note: please do not press *frequently for stand-by/ wake-up operation, in case that the screen is damaged or the data is lost.*

2.4 Taskbar

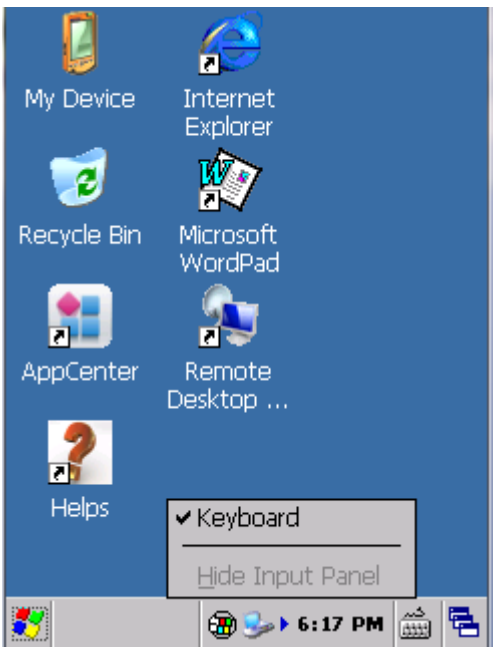
The taskbar is on the bottom of screen which displays on-going tasks;

Start Menu: on the left of task bar, you can see program list in it. Pic 2.4-1

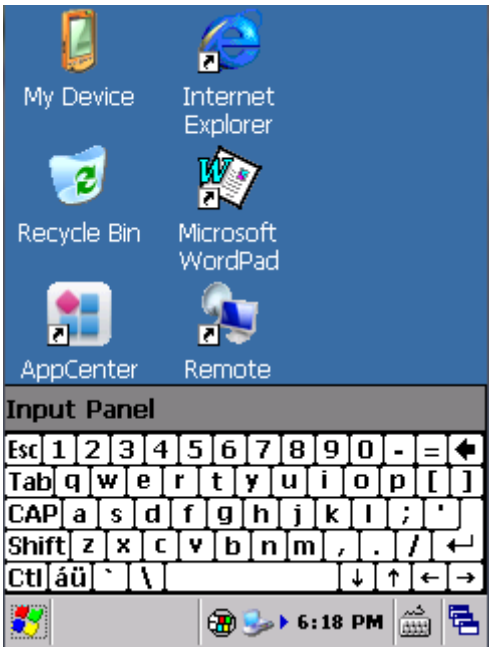


Pic 2.4-1

Input method menu: we can view the available input method options and switch them by clicking it, it also supports soft keyboard input; Pic 2.4-2 and Pic 2.4-2

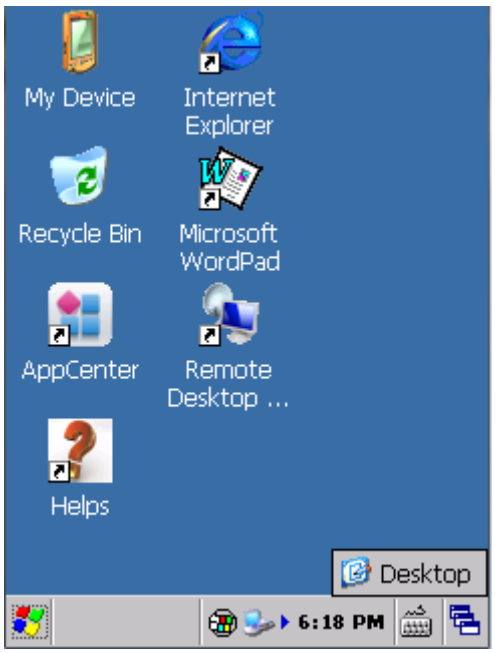


Pic 2.4-2



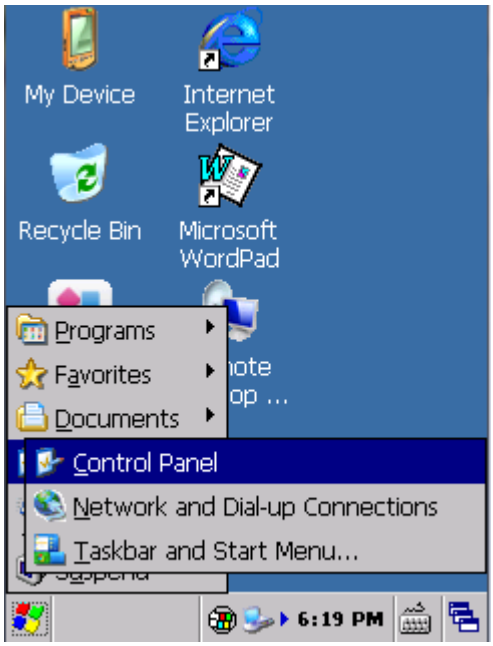
Pic 2.4-3

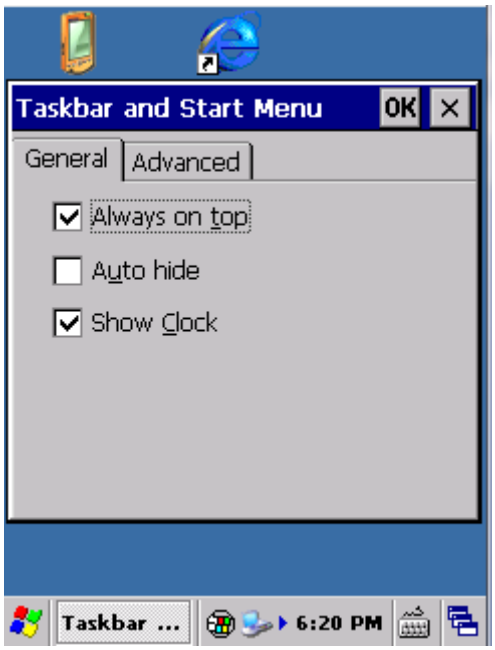
Current task menu, we can view all the current tasks and switch them by clicking it; Pic 2.4-4



Pic 2.4-4

Time, which shows the current time, we can set the properties including time, date, and time zone after entering the interface of 'Data/Time Properties' by double clicking the icon. Meanwhile, we can enable or disable the time showing by choosing → Settings→Task and Start Menu. Pic 2.4-5 and Pic 2.4-6

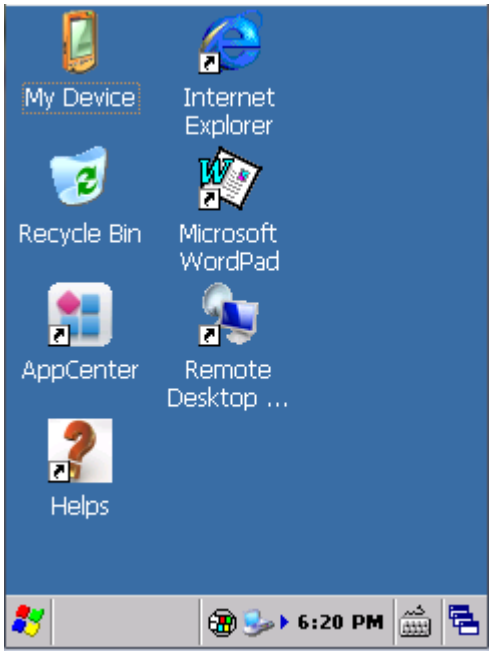




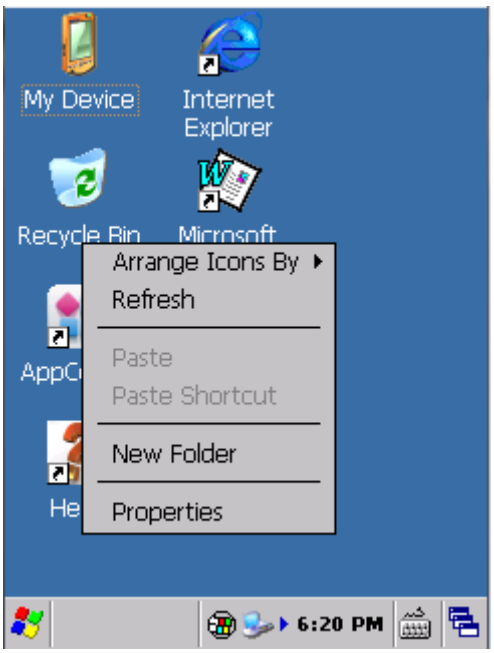
Pic 2.4-5 Pic 2.4-6

2.5 Desktop

After starting the device, the default view is desktop. We can click the icons or shortcuts on desktop by stylus. If touch the screen for a while by stylus, it will be as right click by mouse on PC, we can see the right-click menu. Pic 2.5-1 and Pic 2.5-2



Pic 2.5-1

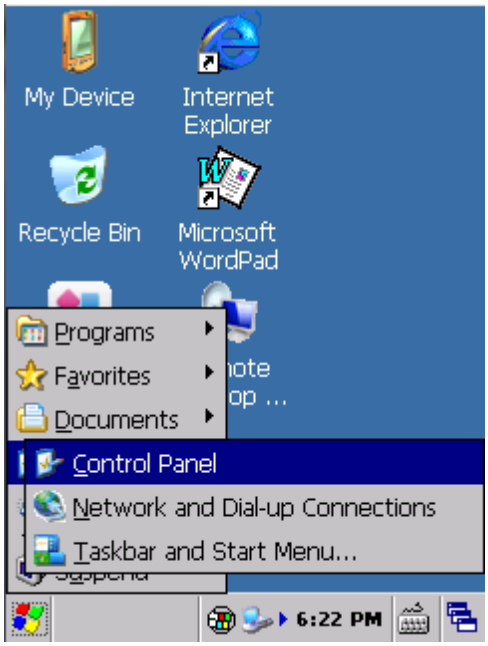


Pic 2.5-2

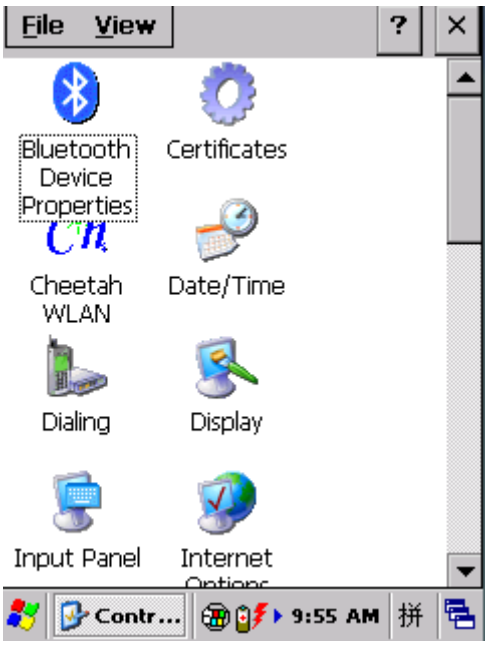
● Chapter 3 System Settings

This chapter introduces system settings and operations on Windows CE.

Click and choose ‘Settings’ and then ‘Control Panel’; Pic 3-1 and Pic 3-2



Pic 3-1



Pic 3-2

The setting applications are listed as follows:

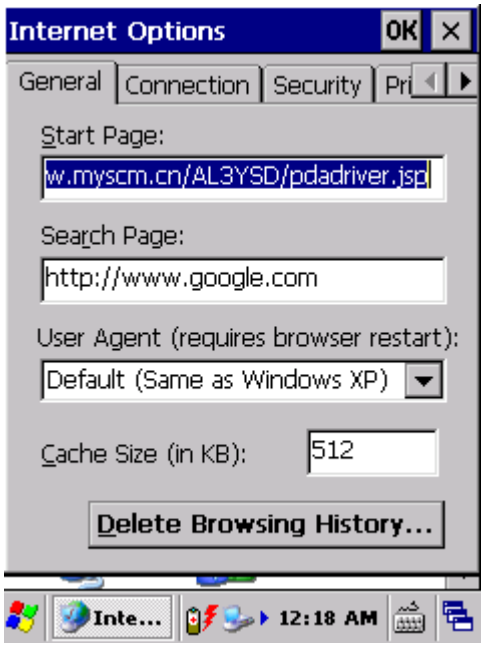
Application	Description
	Set internet options such as homepage, privacy, etc.
	Specify the method connecting with PC.
	Recalibrate the stylus pen.
	Storage management, including HDD and TF cards.
	View battery power and manage power schemes.
	Set keyboard properties.
	Set password for system
	Regional settings. Customize regions, user interface/input language.
	Adjust current time, current date, and change time zone.

	Select and remove programs.
	Switch input method.
	View properties of mouse.
	Change information of the owner.
	Network and dial-up connections. Used for WIFI or GPRS connecting configuration.
	Adjust volume and sounds.
	Display system information, adjust memory and change device name.
	Adjust background, appearance and backlight.
	Adjust dialing properties.
	WLAN setting. Configure wireless network.

Certificates	Certificate information.
USB Mode Switch	Switch the three mode of USB(storage card for u disk, flash disk for U dish and activesync

1.1. Internet Options

Enter the interface of ' Internet Options' to set 'General', 'Connection', 'Security', 'Privacy', 'Advanced' and ' Popups' by clicking 'Internet Options' within 'Control panel'. Pic 3.1-1, Pic 3.1-2, Pic 3.1-3, Pic 3.1-4, Pic 3.1-5 and Pic 3.1-6

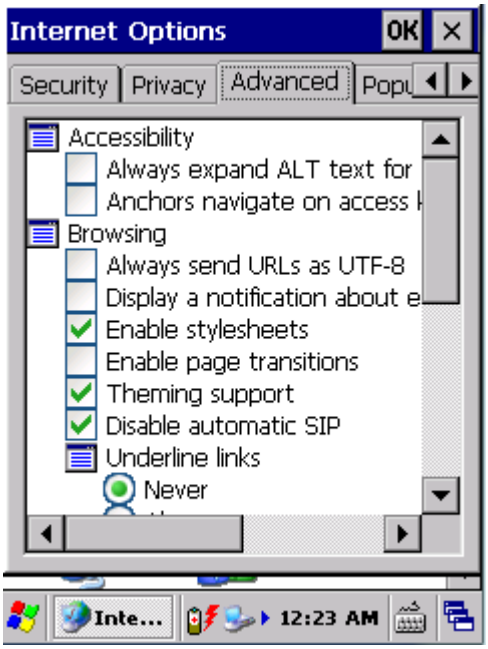


Pic 3.1-1

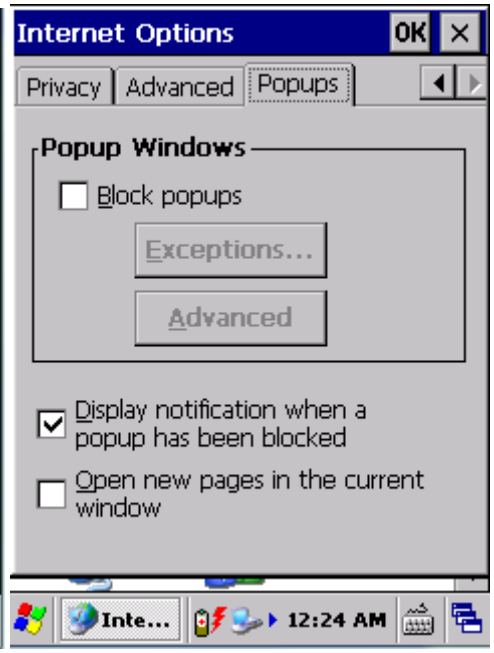
Pic 3.1-2

Pic 3.1-3

Pic 3.1-4



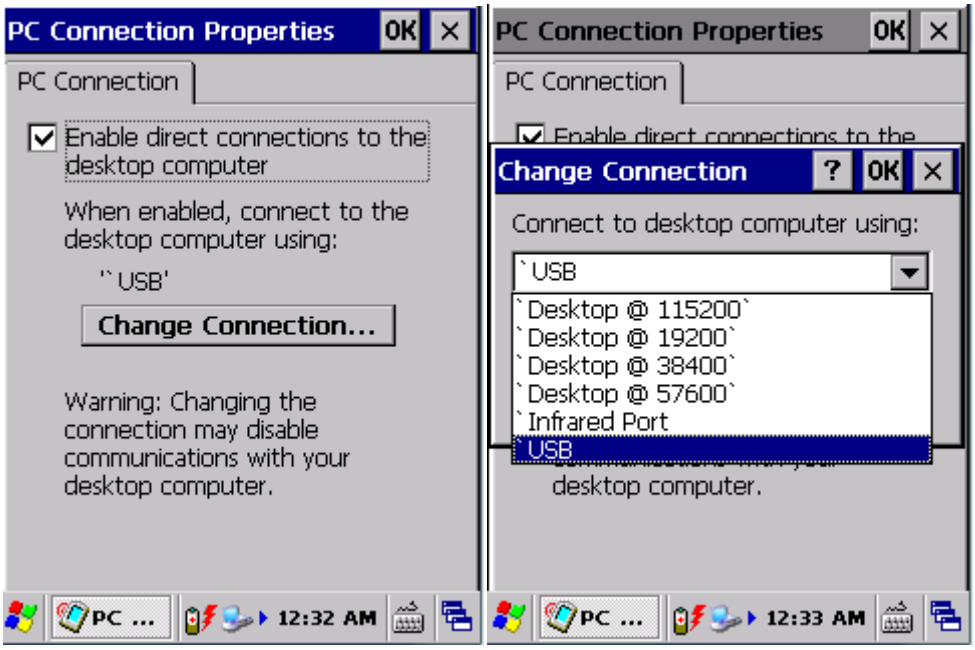
Pic 3.1-5



Pic 3.1-6

1.2. PC Connection

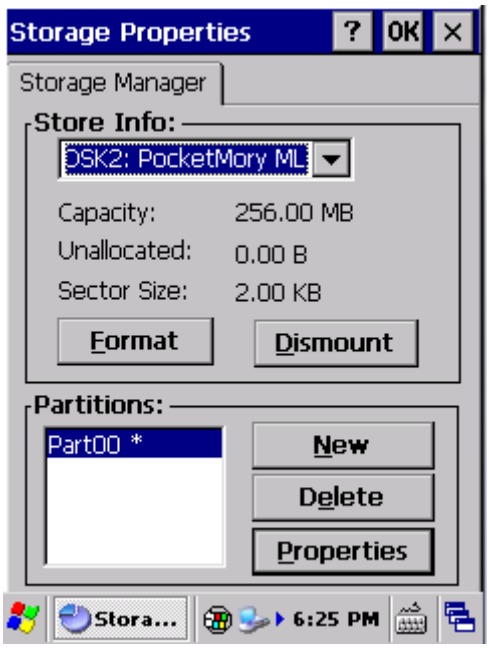
Choose the connection method with PC by click 'PC Connection' within 'Control Panel'; Pic 3.2-1 and Pic 3.2-2



Pic 3.2-1 Pic 3.2-2

1.3. Storage Manager

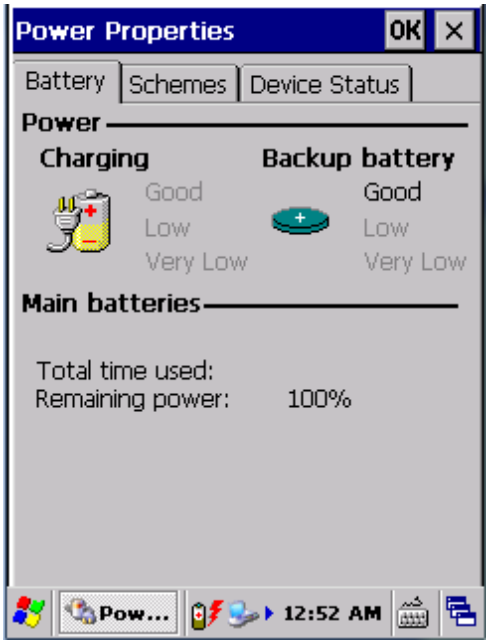
Format or dismount the storage by choosing 'Storage Manager' within 'Control Panel'; Pic 3.3-1



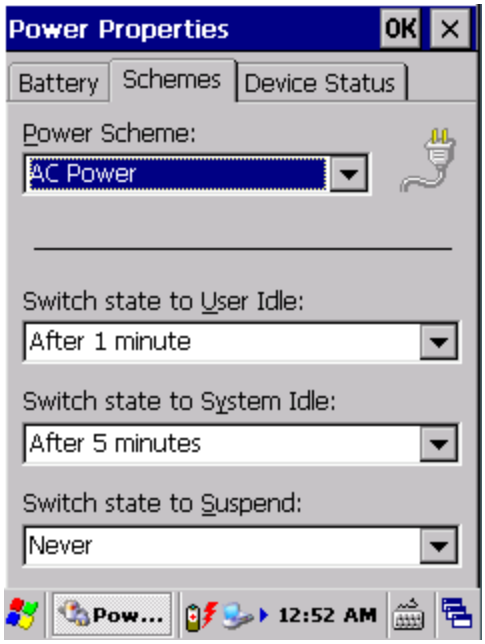
Pic 3.3-1

1.4. Power

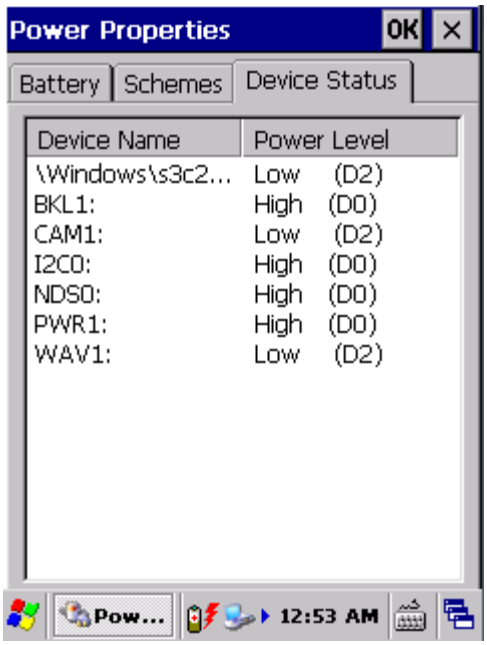
Choose 'Power' within 'Control Panel', the detailed interface is as follows: Pic 3.4-1, Pic 3.4-2 and Pic 3.4-3



Pic 3.4-1



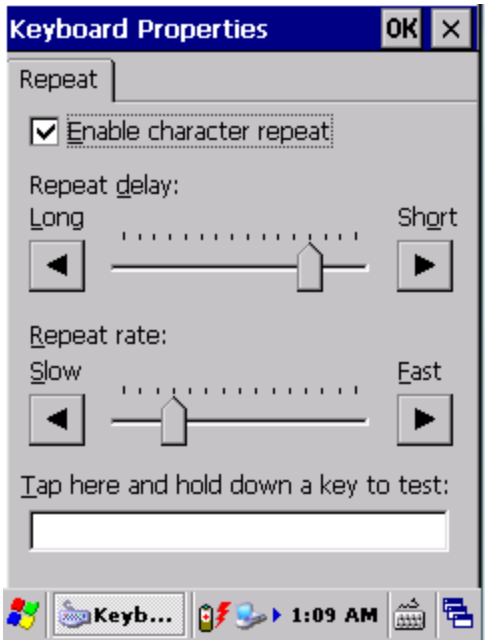
Pic 3.4-2



Pic 3.4-3

1.5. Keyboard

Set the properties of the keyboard by choosing ‘Keyboard’ within ‘Control Panel’; Pic 3.5-1



Pic 3.5-1

1.6. Password

We can set the password to ensure the security by choosing 'Password' within 'Control Panel'. For users have clicked 'Enable password protection at power on' will be required to input the correct password and press 'Enter' for each rebooting. For incorrect password, users are not allowed to log in. Press 'OK' to save the settings we made. Pic 3.6-1

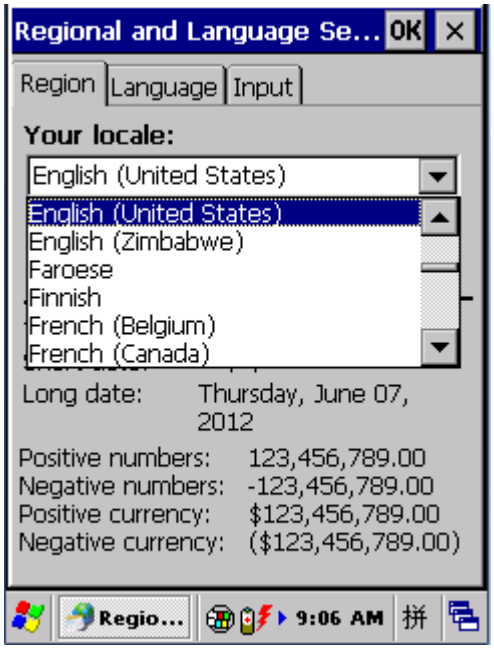
Pic 3.6-1

Note: Please ensure that the password is remembered, otherwise, we cannot log in the device successfully.

Recommend: We recommend not users to enable the password protection function except for some special utilizations.

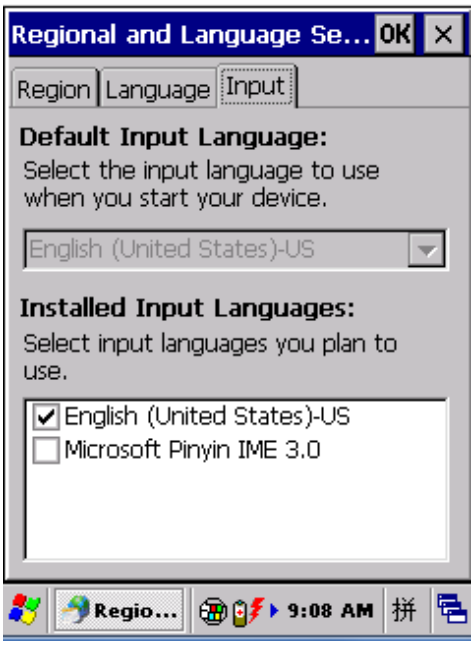
1.7. Regional Settings

By 'Regional Settings', we can change the format information including 'Number', 'Currency', 'Time', 'Date', and also the location information; Pic 3.7-1, Pic 3.7-2, Pic 3.7-3 and Pic 3.7-4

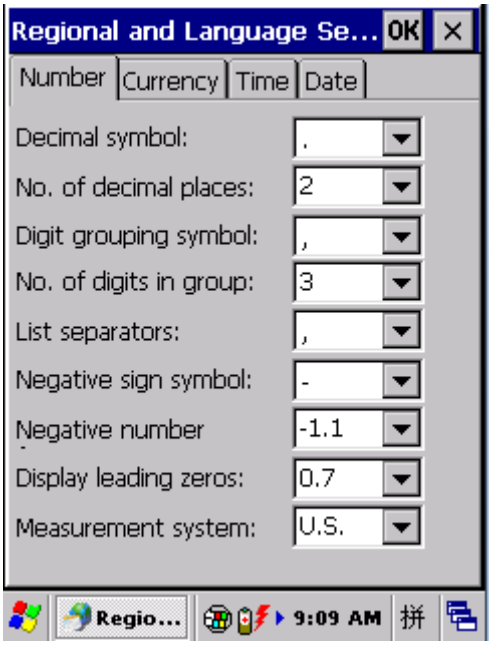


Pic 3.7-1

Pic 3.7-2



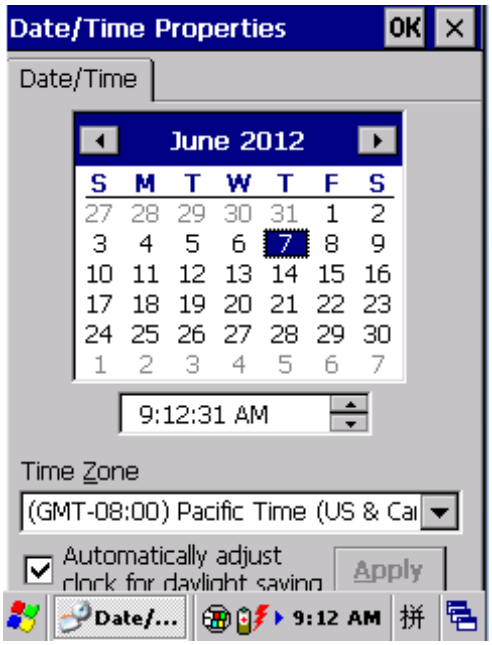
Pic 3.7-3



Pic 3.7-4

1.8. Date/Time

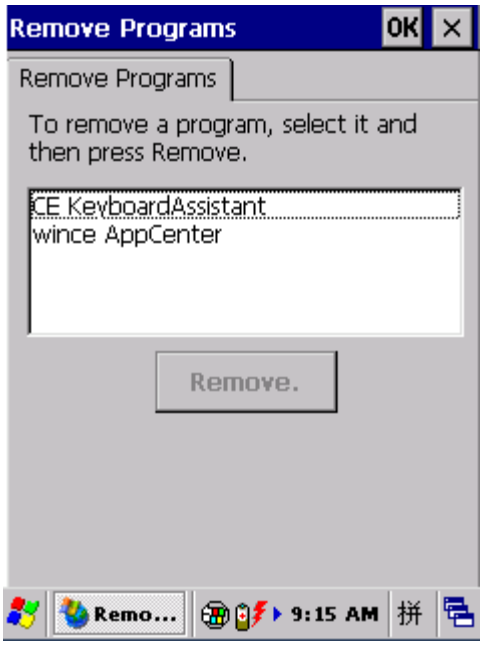
We can set the properties of date/time/time zone by choosing 'Data/Time' within 'Control Panel'; Pic 3.8-1



Pic 3.8-1

1.9. Remove Programs

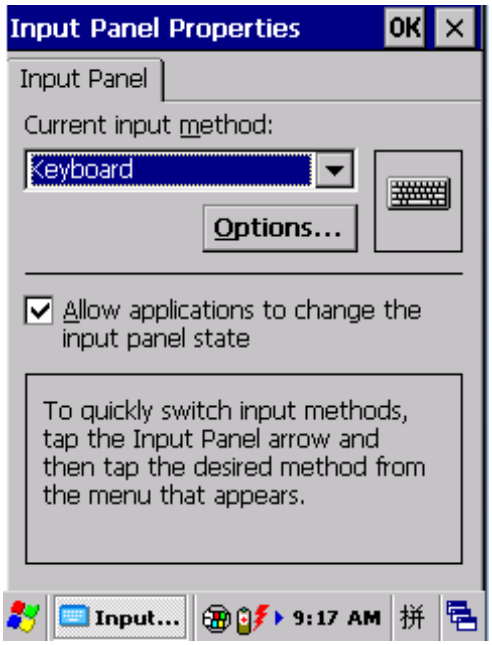
We can remove the application programs by choosing ‘Remove programs’ within ‘Control Panel’; Pic 3.9-1



Pic 3.9-1

1.10. Input Panel

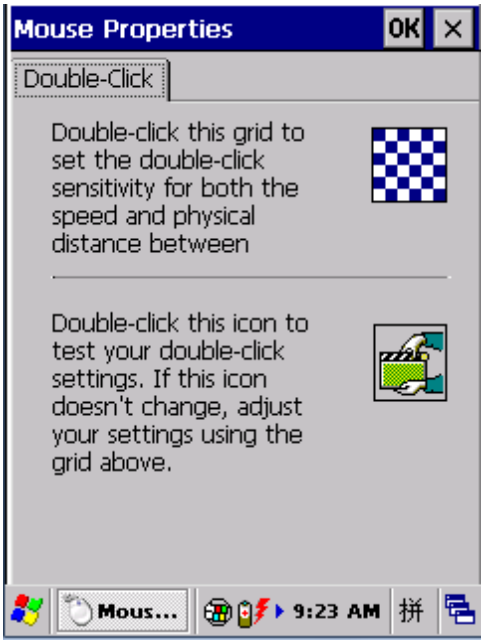
We can change the input method by choosing ‘Input Panel’ within ‘Control Panel’; Pic 3.10-1


Input Panel Properties
OK
Input Panel
Current input method:
Keyboard
Options...
Allow applications to change the input panel state
To quickly switch input methods, tap the Input Panel arrow and then tap the desired method from the menu that appears.
Input...
9:17 AM
拼

Pic 3.10-1

1.11. Mouse

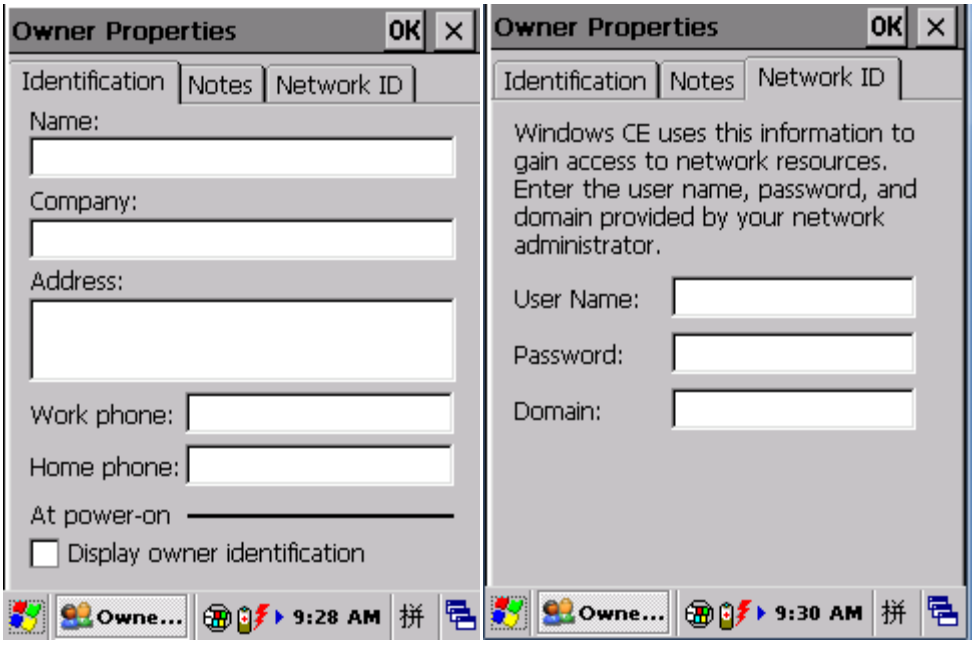
We can test and set the sensitivities of double click and physical distance by choosing ‘Mouse’ within ‘Control Panel’; Pic 3.11-1


Mouse Properties
OK
Double-Click
Double-click this grid to set the double-click sensitivity for both the speed and physical distance between
Double-click this icon to test your double-click settings. If this icon doesn't change, adjust your settings using the grid above.
Mous...
9:23 AM

Pic 3.11-1

1.12. Owner (personal information of the owner)

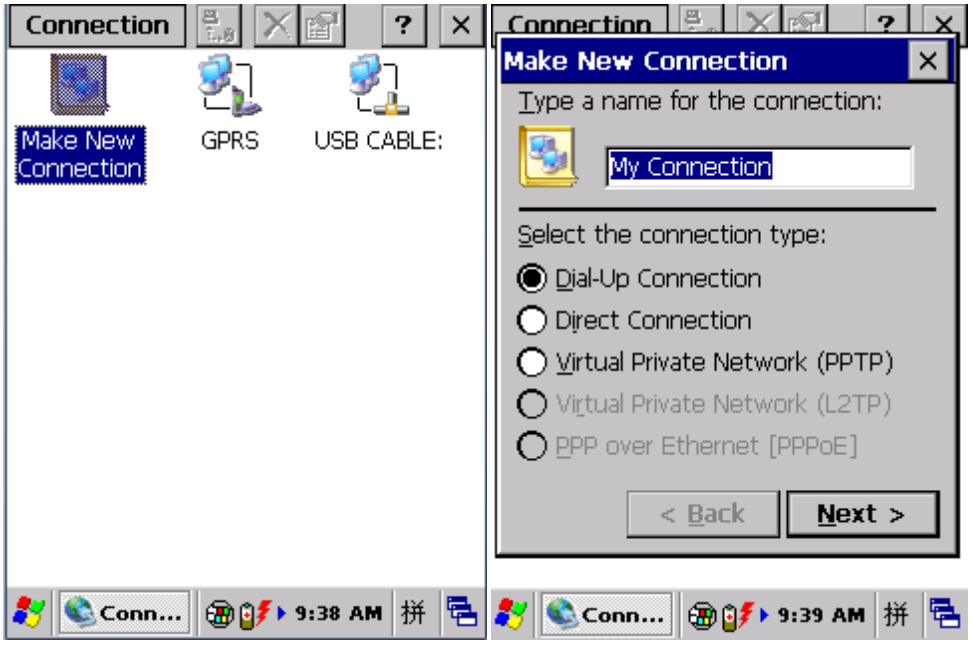
We can set the owner properties by choosing ‘Owner’ within ‘Control Panel’, including ‘Name’, ‘Company’, ‘Address’, ‘Work phone’, ‘Home phone’ and ‘Display owner identification’. Pic 3.12-1 and Pic 3.12-2



Pic 3.12-1 Pic 3.12-2

1.13. Network and Dial-up Connections

We can set the network properties by choosing 'Network and Dial-up Connections' within 'Control Panel'; Pic 3.13-1 and Pic 3.13-2



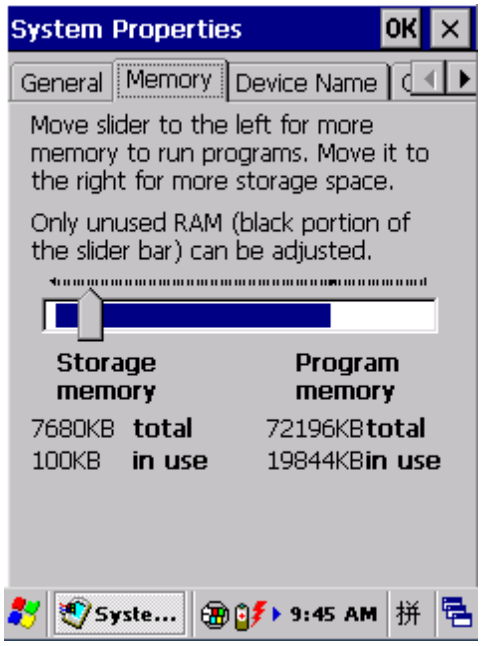
Pic 3.13-1 Pic 3.13-2

1.14. System

General: we can view the system information including system version, processor, memory and expansion cards; Pic 3.14-1

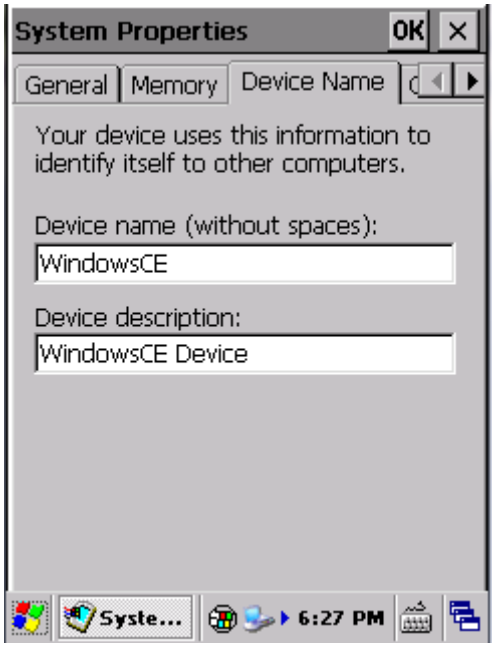
Pic 3.14-1

Memory: we can view the utilization status of the memory; Pic 3.14-2



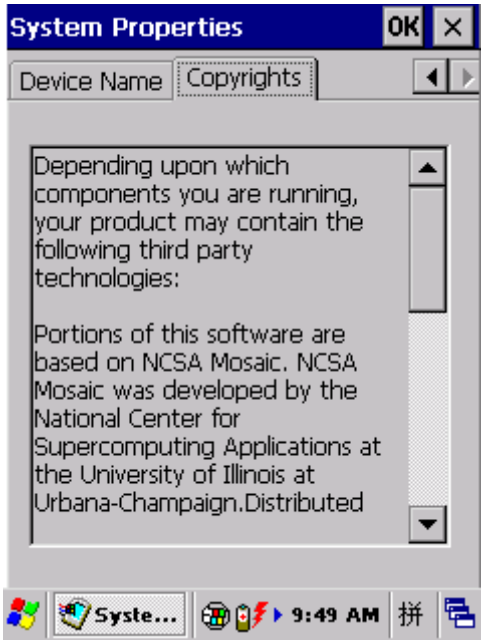
Pic 3.14-2

Device name: We can view and change the device name and device description; Pic 3.14-3



Pic 3.14-3

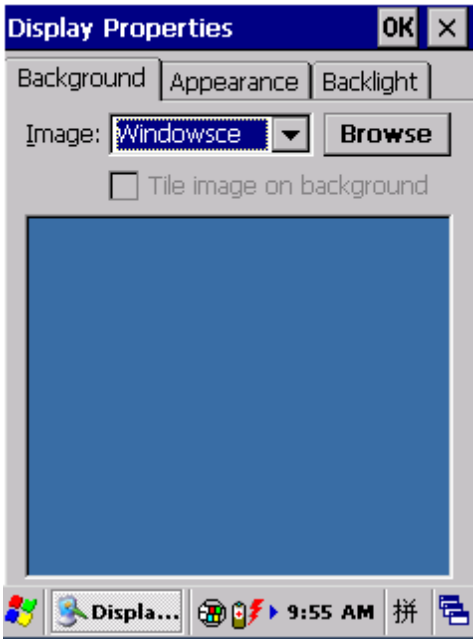
Copyright: We can view the copyright information of the OS; Pic 3.14-4


System Properties
OK
Device Name
Copyrights
Depending upon which components you are running, your product may contain the following third party technologies:
Portions of this software are based on NCSA Mosaic. NCSA Mosaic was developed by the National Center for Supercomputing Applications at the University of Illinois at Urbana-Champaign.Distributed
Syste...
9:49 AM
拼

Pic 3.14-4

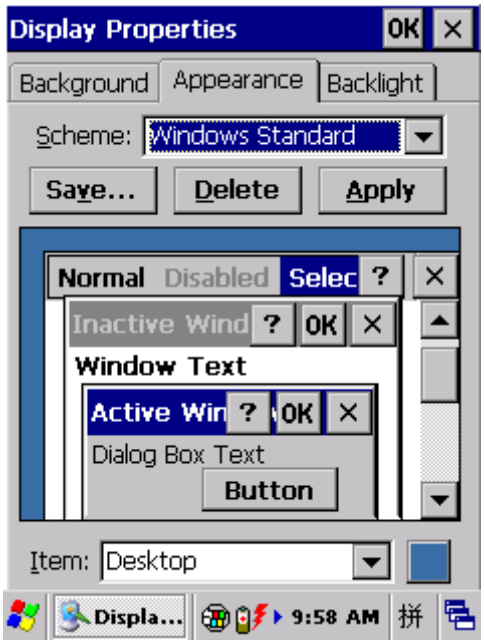
1.15. Display

Background: We can set and view the background image; Pic 3.15-1



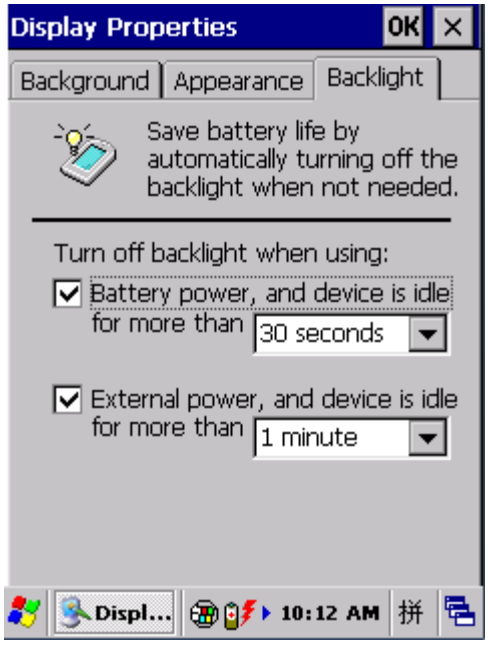
Pic 3.15-1

Appearance: We can set the appearance scheme of the system; Pic 3.15-2



Pic 3.15-2

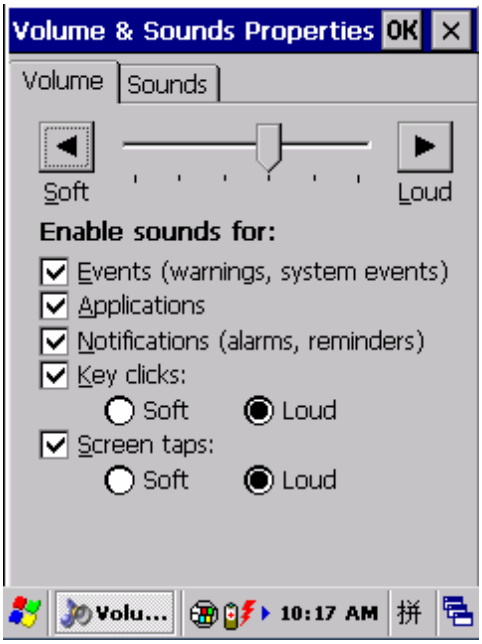
Backlight: We can set the starting time of the backlight to save power and extend the battery life. Please set it according to the requirements. Pic 3.15-3



Pic 3.15-3

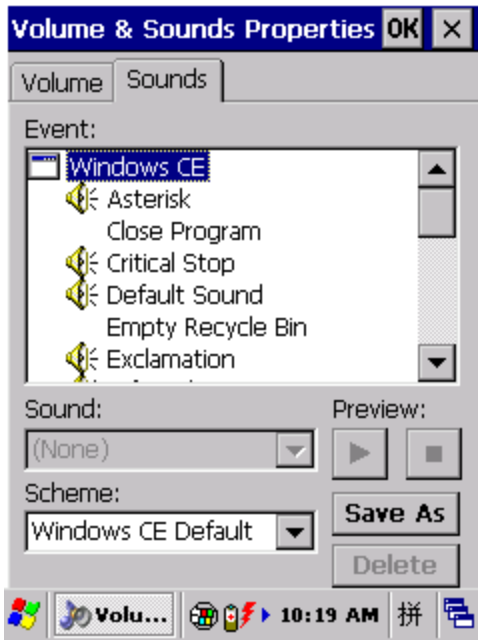
1.16. Volume &Sounds

Volume: We can set the volume; Pic 3.16-1



Pic 3.16-1

Sounds: We can set the sound schemes: Pic 3.16-2



Pic 3.16-2

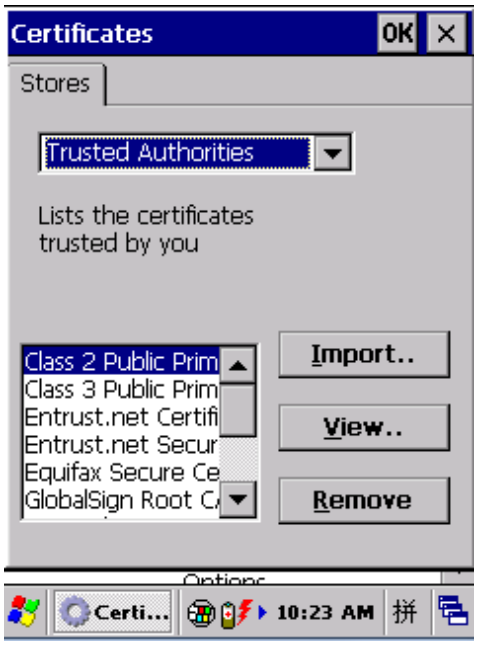
1.17. Dialing

We can set the dialing properties by choosing 'Dialing' within 'Control Panel'; Pic 3.17-1

Pic 3.17-1

1.18. Certificates

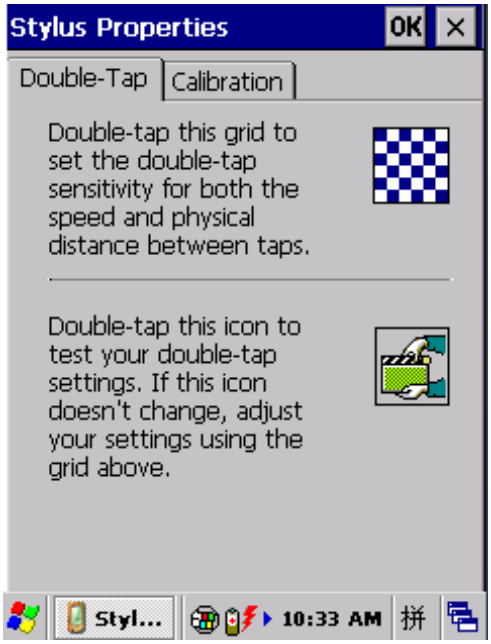
We can manage the certificates by choosing ' Certificates' within 'Control Panel'; Pic 3.18-1



Pic 3.18-1

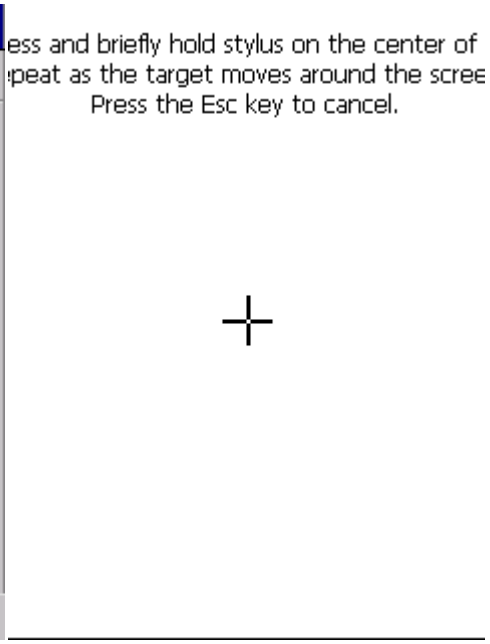
1.19. Stylus

Double Tap: We can set the sensitivities of double click and physical distance; Pic 3.19-1


Stylus Properties
OK
Double-Tap
Calibration
Double-tap this grid to set the double-tap sensitivity for both the speed and physical distance between taps.
Double-tap this icon to test your double-tap settings. If this icon doesn't change, adjust your settings using the grid above.
Styl...
10:33 AM
拼

Pic 3.19-1

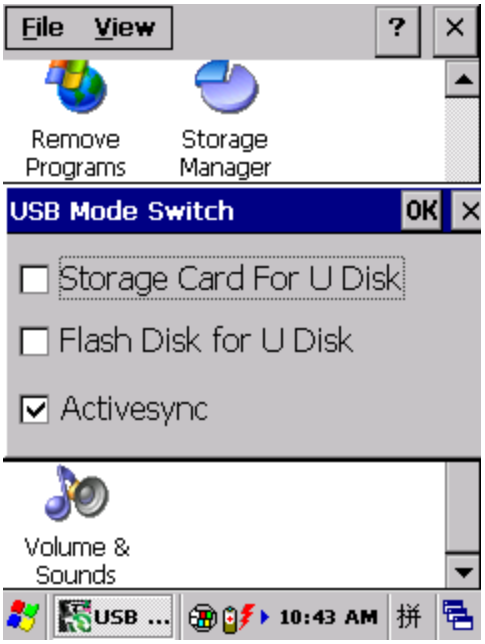
Calibration: We can calibrate the accuracy of the touch screen by choosing ‘Recalibrate’; Pic 3.19-2 and Pic 3.19-2



Pic 3.19-1 Pic 3.19-2

1.20. USB Mode Switch

We can switch the three modes by choosing ‘USB Mode Switch’; Pic 3.20-1



Pic 3.20-1

1.Storage Card For U Disk: the storage card will be used as the U disk;

2.Flash Disk For U Disk: the flash disk will be used as the U disk;

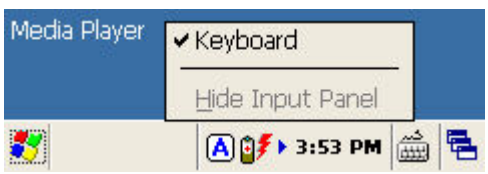
3.Activesync: Synchronization with the PC

● Chapter 4 Keyboard and Input Methods

4.1. Soft keyboard:

1) Input from keyboard: input numbers only by default;

2) Input by soft keyboard: click the keyboard icon on task bar, check the 'Keyboard', it will pop up the soft keyboard , you can type letters from it. Pic 4.1-1 and Pic 4.1-2



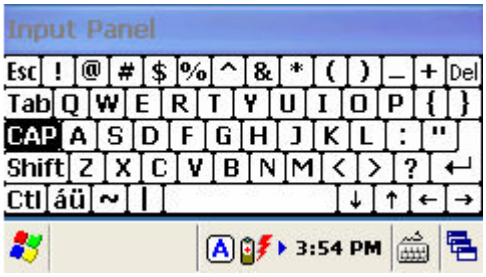
Pic 4.1-1

Pic 4-1-2

There are two methods for inputting capitalized letters;

a) Press CAP on soft keyboard and you can input capital letters and tap CAP again to go back to lower case status. Pic 4.1-3

b) Click Shift and the soft keyboard switch to capital letter input, after a capital letter is input, the soft keyboard will restore to lower case. Pic 4.1-4



Pic 4.1-3

Pic 4.1-4

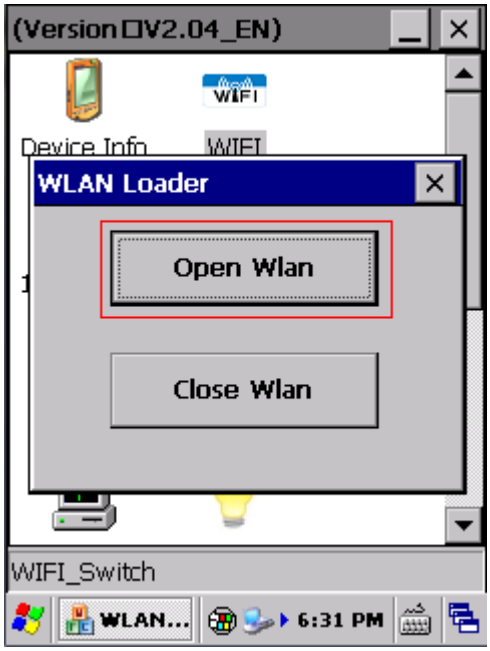
If you need to input symbols, click CAP and select the ones you desire to input. When it's done, click CAP to restore to normal.

● Chapter 5 Network Connection

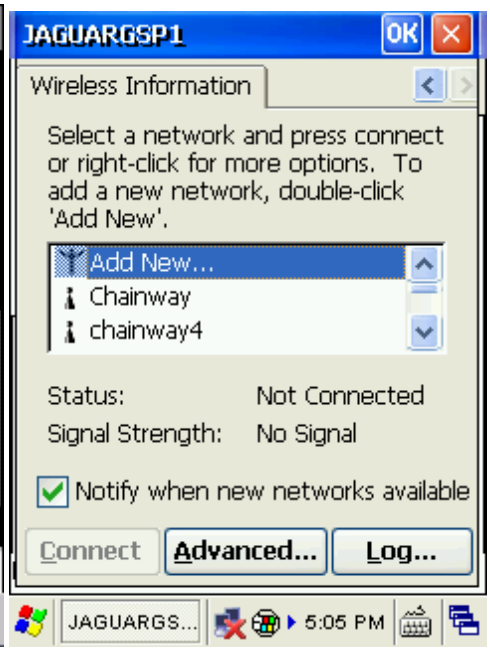
5.1. WIFI

WiFi is a default module of our device. It allows wireless communication and real-time data transmission.

1) Open 'AppCenter' on desktop , then run the application *'WIFI'* in 'AppCenter'; Pic 5.1-1
2) Click 'Load' on 'WLAN Loader' , then network icon will display on toolbar; Pic 5.1-2



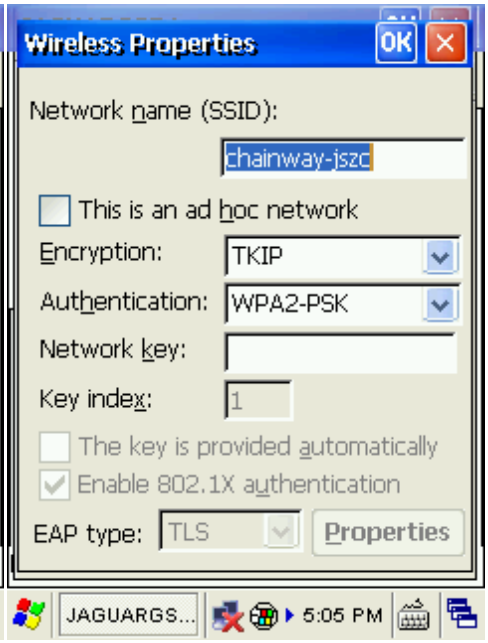
Pic 5.1-1



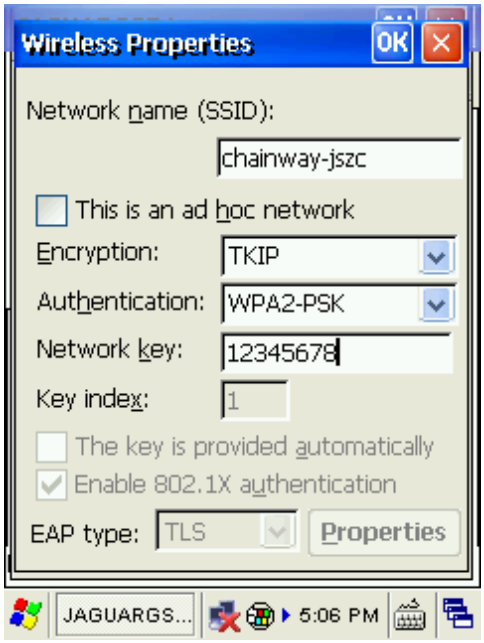
Pic 5.1-2

3) Double click the network icon, choose the router from 'Wireless Information', and then click 'Connect'; choose proper 'Encryption' and 'Authentication', and type password in 'Network Key', and then click 'OK'; Pic 5.1-3, Pic 5.1-4, Pic 5.1-5 and Pic 5.1-6

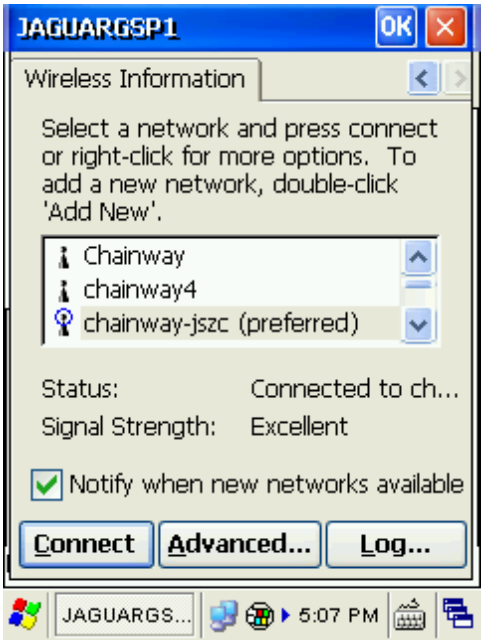
Pic 5.1-3



Pic 5.1-4



Pic 5.1-5



Pic 5.1-6

4) If it is successful connected, the network icon will display , and you can see the 'Status' and 'Signal Strength'.

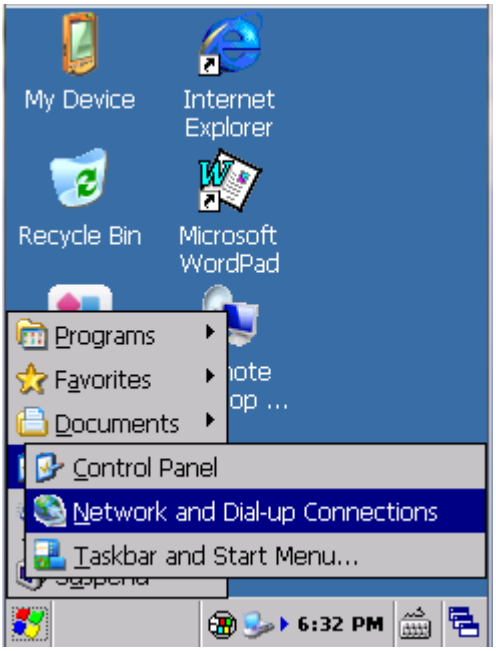
5.2. GPRS Dial-up Connection

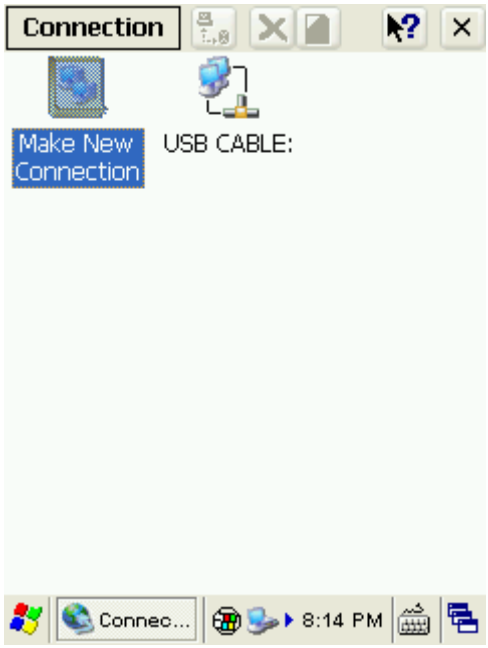
The GPRS module supports GSM/GPRS (900/1800 MHz). It can also support 850/1900MHz if necessary. Before using GPRS, please ensure that your SIM card is available and you have mounted it into the device card slot

5.2.1. GPRS Configuration

Dial-up settings：

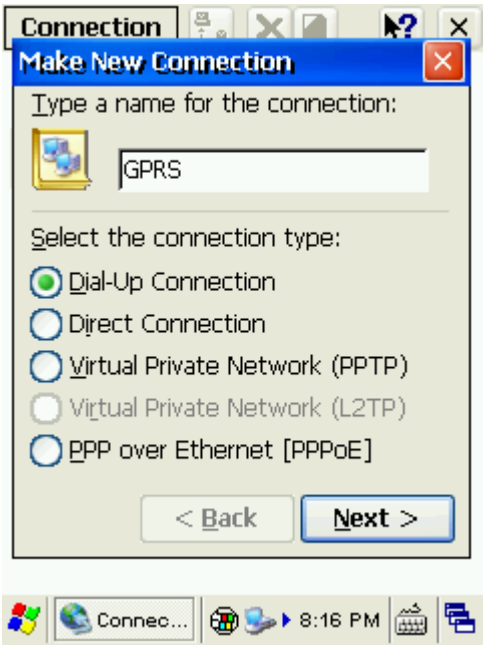
1) Click 'Start Menu'->' Settings'-> 'Network and Dial-up Connections', and then double click 'Make New Connection'. Pic 5.2.-1 and Pic 5.2-2

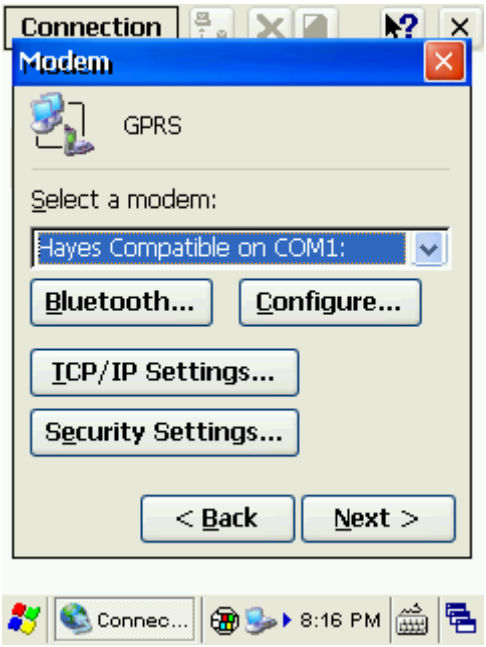




Pic 5.2-1 Pic 5.2-2

2) Input connection name 'GPRS' and then 'Next' ; click 'Configure' then 'Next'; Pic 5.2-3 and Pic 5.2-4





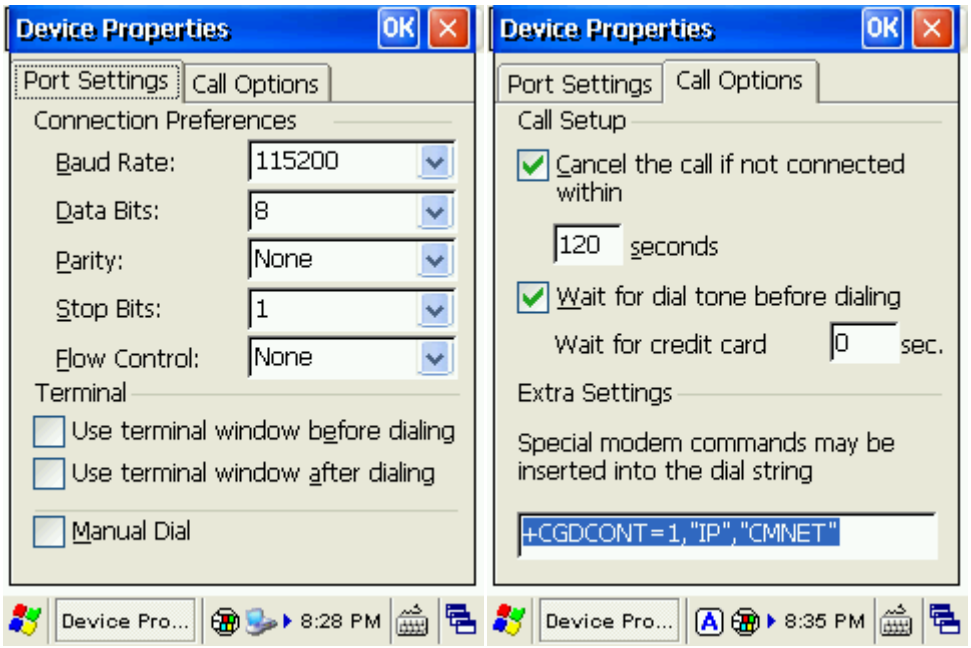
Pic 5.2-3 Pic 5.2-4

3) In 'Port Settings', set 'Connection Preferences' as below:

'Baud Rate': 115200; 'Data Bits': 8; 'Parity': None; 'Stop Bits': 1; 'Flow Control': None

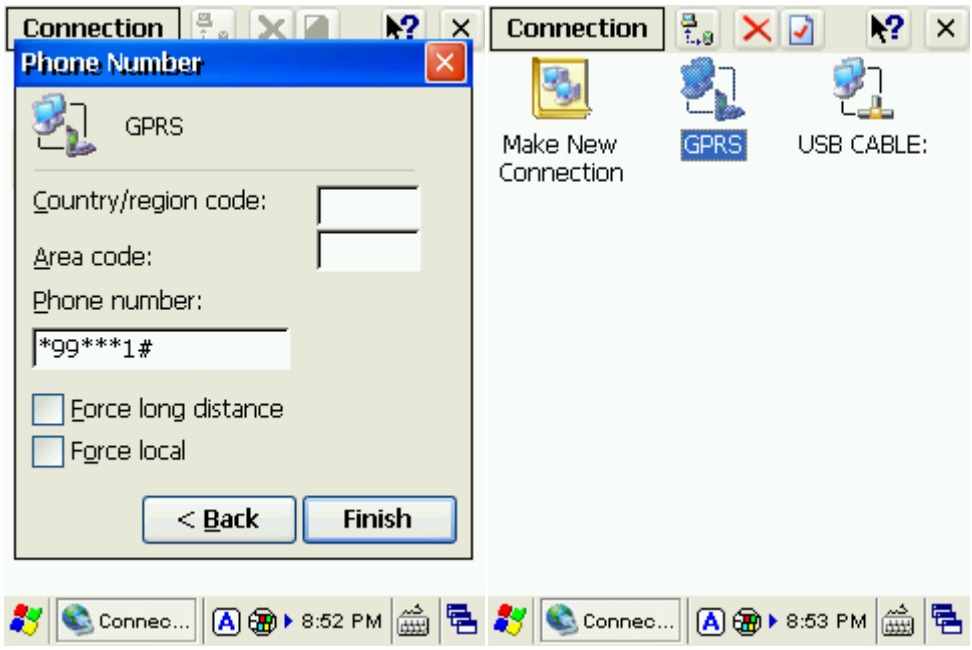
Then click 'Call Options' to turn to another tab page;

4) Input '+CGDCONT=1,"IP","CMNET"' (input all blue characters including the commas and quotation marks) into 'Extra Settings', the 'CMNET' (which is short for China Mobile Network) should be replaced by your local 'GPRS APN' (Access Point Name); left other default, then click 'OK'; Pic 5.2-5 and Pic 5.2-6



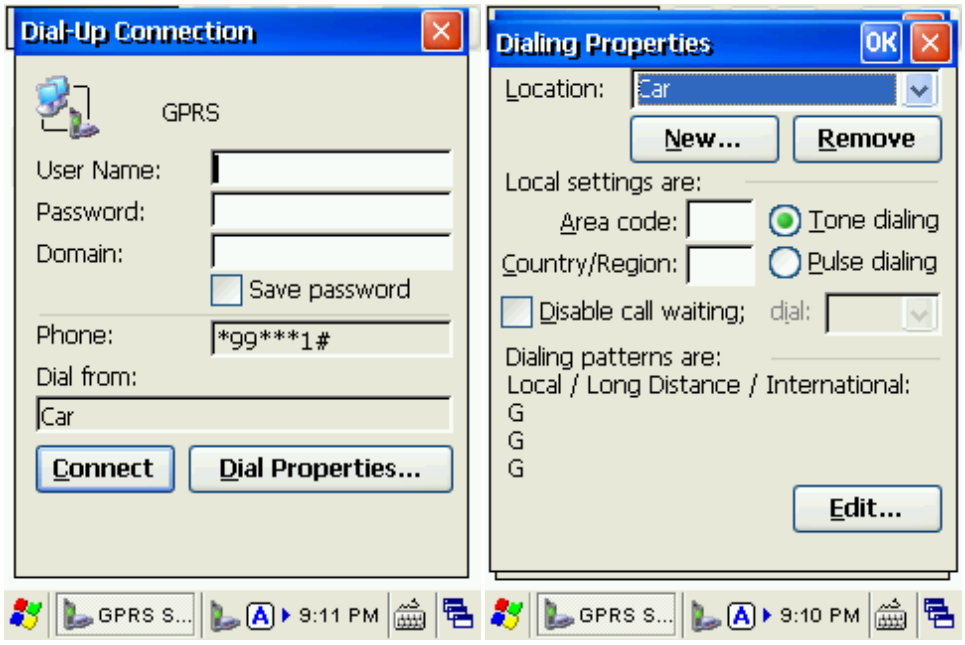
Pic 5.2-5 Pic 5.2-6

5) Click Next to Phone Number page, input the country/region code, area code and Phone number (*99***1#***)***, then click Finish; now you can see the GPRS connection icon; Pic 5.2-7 and Pic 5.2-8



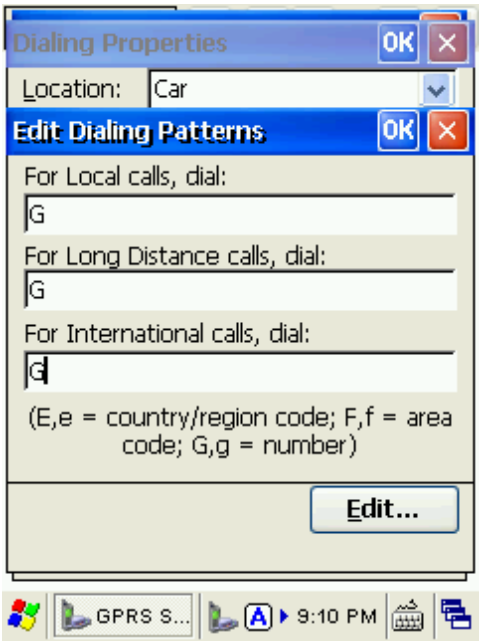
Pic 5.2-7 Pic 5.2-8

6) Double click the GPRS icon; in 'Dial-Up Connection' page, keep 'User Name', 'Password' and 'Domain' blank, and then click 'Dial Properties'; choose 'Location' as 'Car' and then click 'Edit'; Fill the 3 edit boxes all with letter 'G' and then 'OK'. Click 'OK' on 'Dialing Properties', and then back to desktop. Pic 5.2-9, Pic 5.2-10, Pic 5.2-11 and Pic 5.2-12



Pic 5.2-9

Pic 5.2-10



Pic 5.2-11

Pi 5.2-12

Note: During the process of our configurations, we use 'CMNET' as the reference, for users please input the local GPRS setting and dial-up information by contacting the local service provider.

5.2.2 GPRS Dial-up Connection

Please pay attention to the following points before dial up:

- The configurations are set properly;
- SIM card is installed properly as the followed image;
- The SIM card works at the frequency of 900Mhz and 1800Mhz;
- The SIM card is available and the GPRS function is activated;

● Chapter 6 Synchronization with the PC and Updating OS

We can visit the handheld, preview, copy and cut file or synchronize the data with the PC after installing the ActiveSync software successfully. The following introduces the detailed steps on how to install it:

6.1. Introductions on the ActiveSync

We support 3 versions ActiveSync software for different OS (operation system):

- **ActiveSync4.5_OfficialRelease.msi**

Supports OS：

Windows Server 2003；Windows Server 2003 Service Pack 1；Windows Server 2003 Service Pack 2；Windows XP；Windows XP 64-bit；Windows XP Embedded；Windows XP Embedded Service Pack 1；Windows XP Embedded Service Pack 2；Windows XP for Itanium-based Systems Version 2003；Windows XP Home Edition；Windows XP Media Center Edition；Windows XP Professional 64-Bit Edition (Itanium)；Windows XP Professional 64-Bit Edition (Itanium) 2003；Windows XP Professional Edition；Windows XP Professional x64 Edition；Windows XP Service Pack 1；Windows XP Service Pack 2；Windows XP Starter Edition；Windows XP Tablet PC Edition

- **ActiveSync6.1_OfficialRelease-x64.exe**

Supports OS（64bit）：

Windows 7 Ultimate；Windows 7 Enterprise；Windows 7 Professional；Windows 7 Home Premium；Windows Vista Ultimate；Windows Vista Enterprise；Windows Vista Business；Windows Vista Home Premium；Windows Vista Home Basic；Windows Vista Server

- **ActiveSync6.1_OfficialRelease-x86.exe**

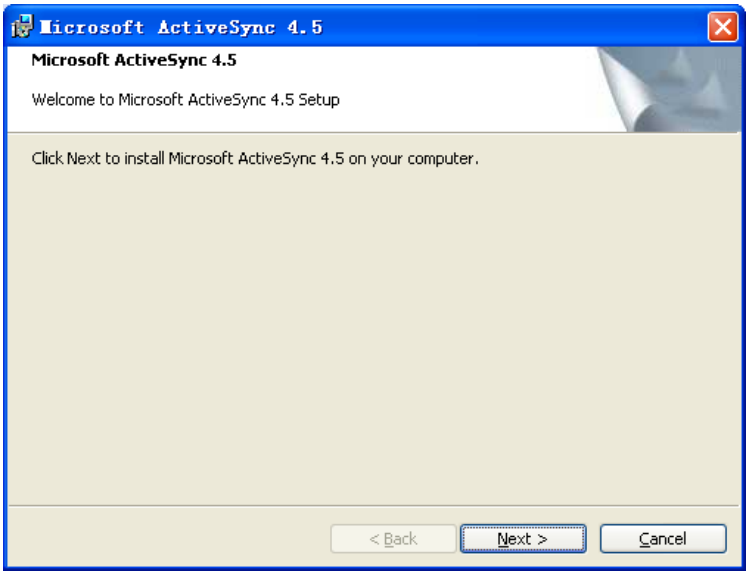
Supports OS（32bit）：

Windows 7 Ultimate；Windows 7 Enterprise；Windows 7 Professional；Windows 7 Home Premium；Windows 7 Starter；Windows Vista Ultimate；Windows Vista Enterprise；Windows Vista Business；Windows Vista Home Premium；Windows Vista Home Basic；Windows Vista Server

6.2. ActiveSync Installation

Choose the ActiveSync properly according to the OS of the PC, and we use ActiveSync4.5_OfficialRelease.msi as the reference,

1) Open the software, the following is the interface: Pic 6.2-1


Microsoft ActiveSync 4.5
Microsoft ActiveSync 4.5
Welcome to Microsoft ActiveSync 4.5 Setup
Click Next to install Microsoft ActiveSync 4.5 on your computer.
< Back
Next >
Cancel

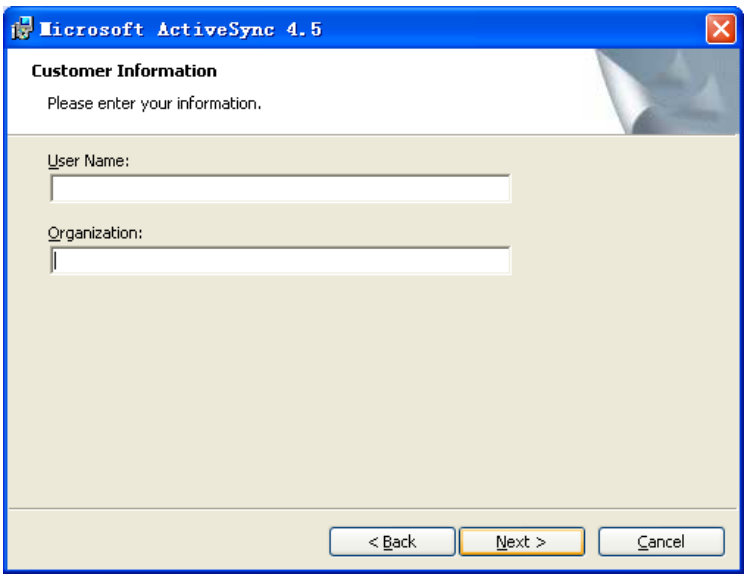
Pic 6.2-1

2) Choose ‘Next’ and we will enter the following interface: Pic 6.2-2

Microsoft ActiveSync 4.5
License Agreement
Please read the following license agreement carefully.
MICROSOFT SOFTWARE LICENSE TERMS
MICROSOFT ACTIVESYNC 4.5
These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft
I accept the terms in the license agreement
I do not accept the terms in the license agreement
Print
< Back
Next >
Cancel

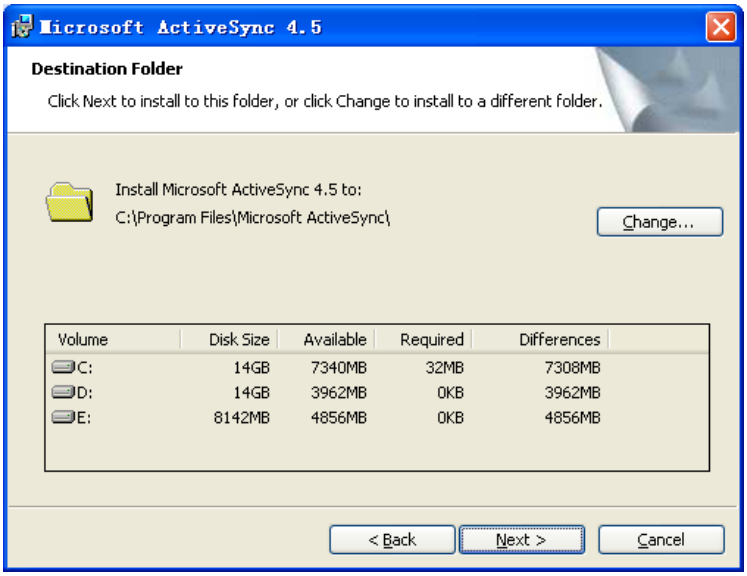
Pic 6.2-2

3) Then we choose 'I accept the terms in the license agreement', and click 'Next'; Pic 6.2-3



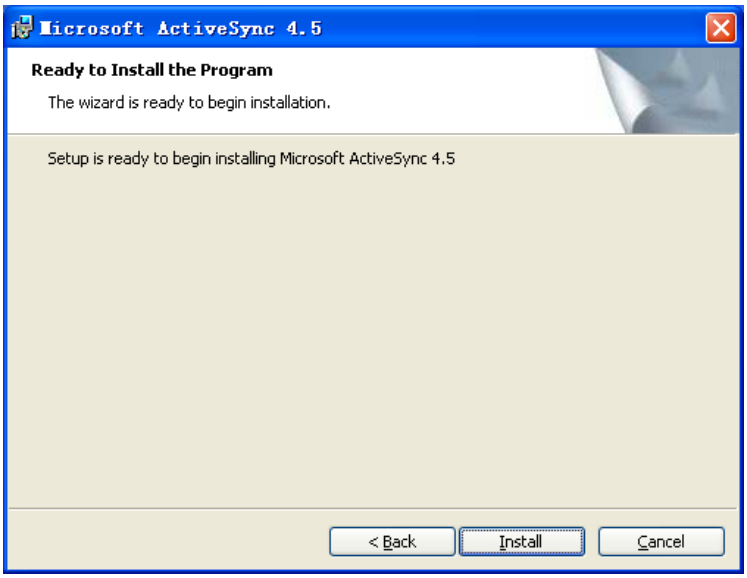
Pic 6.2-3

4) Input the user name and organization information and then click 'Next'; Pic 6.2-4



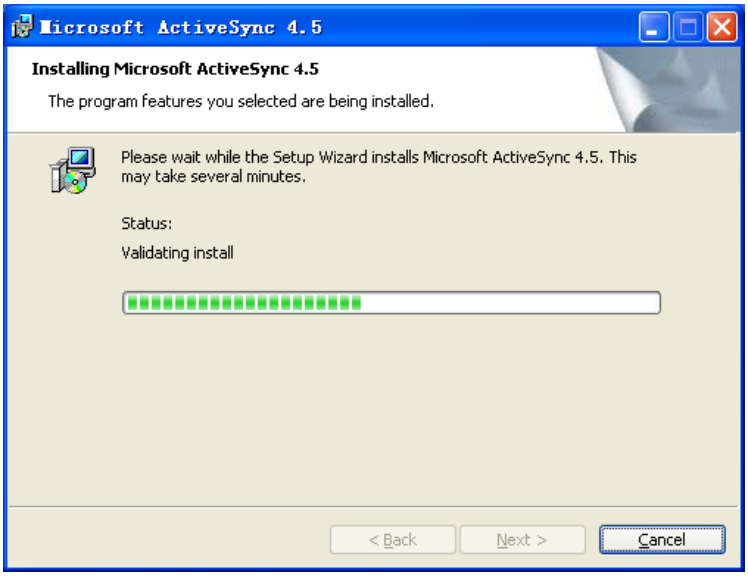
Pic 6.2-4

5) The default installation path is 'C:\Program Files\ Microsoft ActiveSync', we can click 'Change' to change the installation path; Pic 6.2-5


Microsoft ActiveSync 4.5
Ready to Install the Program
The wizard is ready to begin installation.
Setup is ready to begin installing Microsoft ActiveSync 4.5
< Back
Install
Cancel

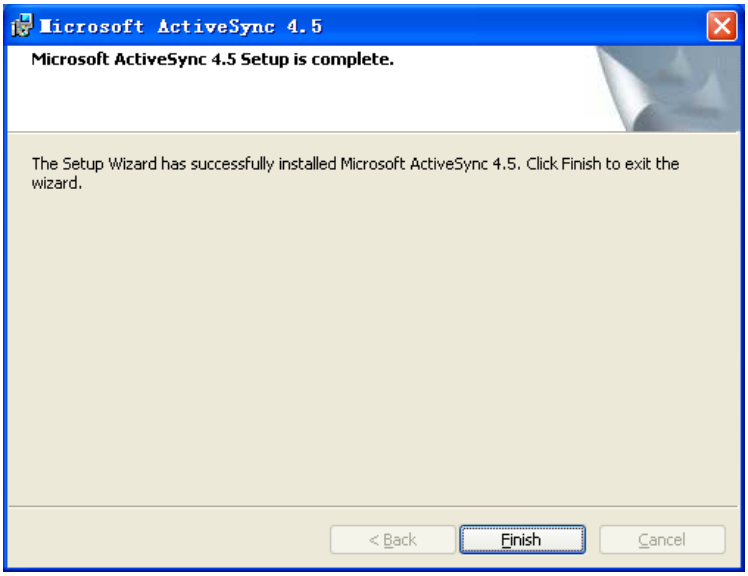
Pic 6.2-5

6) Confirm the operating is correct before click 'Install' to continue the process of installation; Pic 6.2-6


Microsoft ActiveSync 4.5
Installing Microsoft ActiveSync 4.5
The program features you selected are being installed.
Please wait while the Setup Wizard installs Microsoft ActiveSync 4.5. This may take several minutes.
Status:
Validating install
< Back
Next >
Cancel

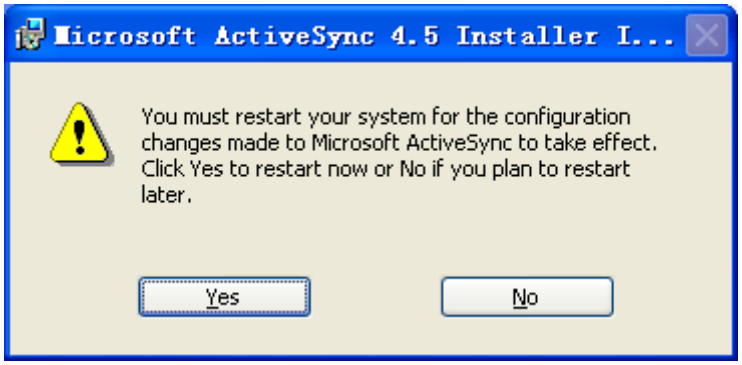
Pic 6.2-6

7) After the successful installation, we can go to the followed interface: Pic 6.2-7


Microsoft ActiveSync 4.5
Microsoft ActiveSync 4.5 Setup is complete.
The Setup Wizard has successfully installed Microsoft ActiveSync 4.5. Click Finish to exit the wizard.
< Back
Finish
Cancel

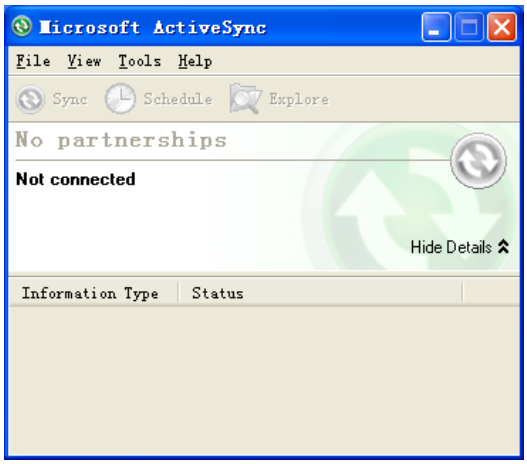
Pic 6.2-7

8) Click 'Finish' to finish the installation, and choose 'Yes' to reboot the PC; Pic 6.2-8


Microsoft ActiveSync 4.5 Installer I...
You must restart your system for the configuration changes made to Microsoft ActiveSync to take effect. Click Yes to restart now or No if you plan to restart later.
Yes
No

Pic 6.2-8

9) After the rebooting, we can find the icon on the right corner of the PC, double click it to open the ActiveSync; Pic 6.2-9



Pic 6.2-9

6.3. Update Operating System

Before updating, please backup your data: copy the data to PC or other disk like SD card. All data and applications will be erased after updating.

6.3.1 Copy System Files to SD Card

1) Format the SD card;

*Note: Format the card. Do not choose **fast format**. Choose the **File System** as **FAT32**.*

Tip: For the TF card installed in the device by default when being purchased from us, the step has been done before

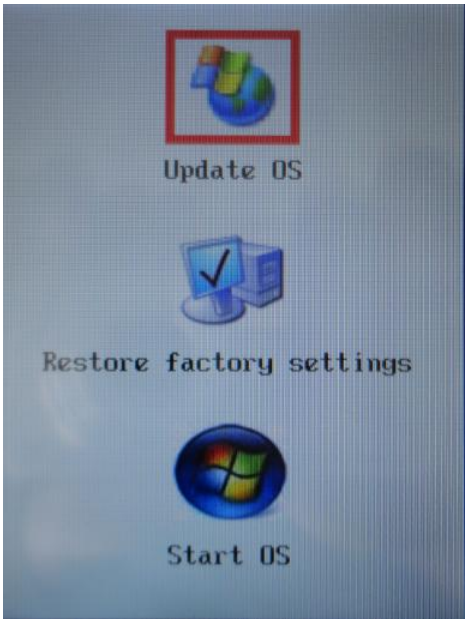
2) Copy the update files into the SD card;

3) Install SD card to the device.

6.3.2 Update OS for Windows CE

After finishing steps above, restart the device, and then press ***F1***

as soon as possible; then you will see it as Figure6-3-1; choose ***Update OS***, then press the yellow button on keyboard; then please wait the system update and start.



Pic 6.3-1

6.4. Restore Factory Settings

Before updating, please backup your data: copy the data to PC or other disk like SD card. All data and applications will be erased after updating.

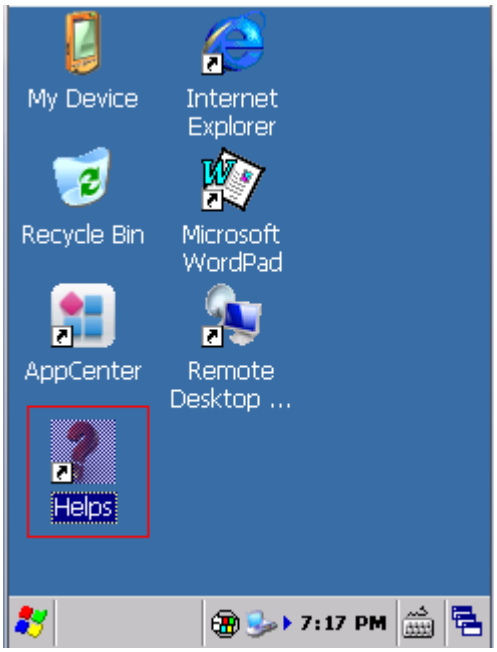
After finishing steps above, restart the device, and then press ***F1***

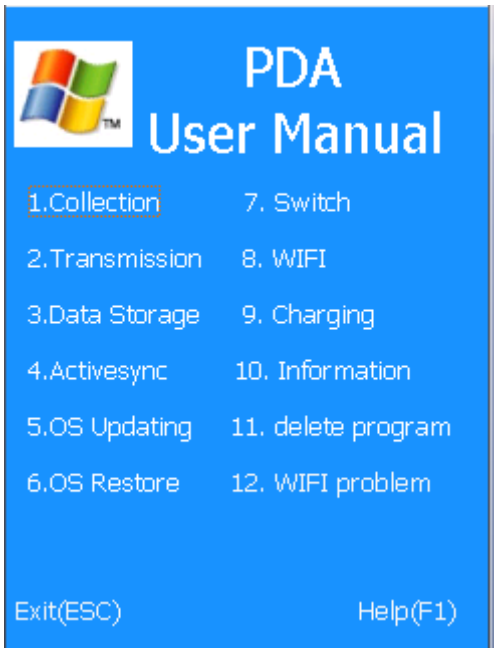
as soon as possible; then you will see it as Figure6-3-1; choose ***Restore factory settings***, then press the yellow button on keyboard; then please wait the system restore and start.

If you choose ***Start OS***, the system will start normally.

● Chapter 7 Functional Utilization

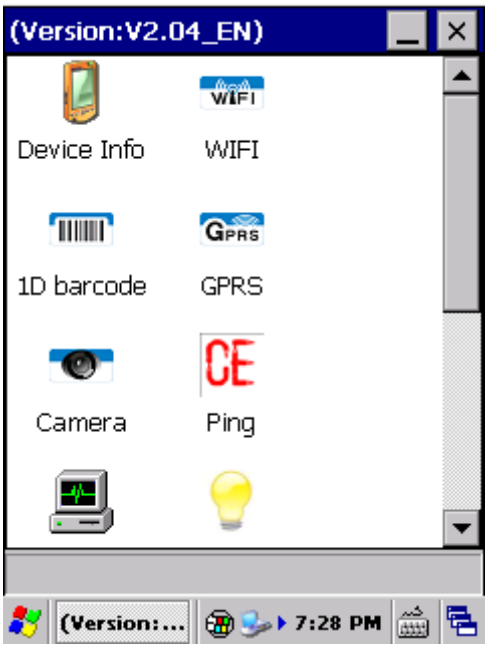
Helps as a test Demo which includes multiple modules containing 1D barcode, 2D barcode, LF, HF, WIFI, GPRS, Bluetooth and camera is installed before leaving the factory. Users can adjust them according to the functional modules. For detailed description, please refer to <Helps >.
Pic 7-1





Pic 7-1 Pic 7-2

The following is the captured image of the interface: Pic 7-3



Pic 7-3

● Chapter 8 Malfunction and Repair

8.1. Equipment and System Problems

Table8-1 Equipment and System Problems

Problems	Solutions
Device can't start	● Ensure the battery is correctly placed (see 2.1). ● Change fully-charged battery. ● Take off the battery and place again.
Touch-screen doesn't work	● Clean the touch screen. ● Recalibrate by the calibration procedure. ● Restart the device
Screen fails to display	● Check if the device is in standby status. ● Restart the device. ● Replace with fully-charged battery.
Keyboard doesn't work	● Check if the device is in standby status. ● Restart the device. ● Replace with fully-charged battery.
TF card can't be identified	● Check if the TF card is placed wrongly. ● Check if the TF card is placed firmly. ● Check if the TF card is damaged. ● Restart the device. ● Replace with fully-charged battery.
Battery can't be	● Check if the adapter is damaged.

recharged	● Check if the USB cable is damaged. ● Check if the adapter is plugged into the socket (220V). ● Check if the adapter is plugged firmly.

8.2. Scanning Problems

Table8-2 Scanning Problems

Problems	Solutions
Press "scan" button but no action	● Check if the scanner head is damaged. ● Check if the program is correct (please refer to DEMO for specific codes). ● Replace with fully-charged battery.
No data collected after scanning	● Check if the scanner head is damaged. ● Check if the program is correct (please refer to DEMO for specific codes). ● Check if the barcode is damaged. ● Make sure it's in effective operating/scanning distance/range. ● Make sure the barcode to be scanned is identifiable by the device. ● Check if the scanning window is covered with dusts. ● Replace with fully-charged battery.

8.3. RFID Problems

Table 8-3 RFID Problems

Problems	Solutions
RFID tag can't be identified	● Ensure the RFID module in the handheld terminal is compatible with the tags. ● Ensure the program is correct (please refer to DEMO) ● Ensure the tag being scanned is within the RFID sensing area (please see 3.2)

8.4. Network and Communication Problems

Table 8-4 Network and Communication Problems

Problems	Solutions
Can't be recognized after USB is connected	● Ensure USB cable is plugged. ● Ensure USB cable is not damaged. ● Restart the device. ● Pull out and reconnect the USB cable. ● Check if Microsoft ActiveSync has been installed properly (please refer the Chapter 7) ● Ensure connection to PC is correct
WIFI communication error	● Ensure the program is correct (Please refer to DEMO). ● Ensure the setting is correct (please refer to 5.1) ● Ensure the accessories come with WIFI connection joint, which is in effective transmission distance.

● Chapter 9 Maintenance

- Do not use non-standard recharger or batteries, which may cause damage to the device.
- Do not scrap the screen. Use the attached stylus or plastic pen-shape objects that suit touch screens. Do not use steel pen, pencil or other sharp and hard articles on the screen.
- Use soft cloth with diluted screen detergent to clean the screen.
- Deal with used batteries according to environmental regulations. Do not throw batter into fire, otherwise it may cause explosion.

● Appendix 1 Code Types of 1D Barcode Scanner

The 1D barcode scanner can set parameters by scanning specific ***Function Barcodes***.

Operation Steps: aim the scanner at a function barcode; scan it; the laser will quickly disappear if succeed, which shows that setting is successful.

A1.1 Supported Code Types

Appendix Table 1

Enable	Disable	
Code 39	Codabar	IATA 2 of 5
Code 128	Discrete 2 of 5	UPC A with 2 Supps.
Interleaved 2 of 5	Code 93	UPC A with 5 Supps.
UPC A	MSI	UPC E0
EAN 8	Trioptic Code 39	UPC E0 with 2 Supps.
EAN 13	Bookland EAN	UPC E0 with 5 Supps.
EAN 128	Code 11	EAC 13 with 2 Supps.
UPC E	Chinese 2 of 5	EAN 13 with 5 Supps.
ISBT 128	UPC E1	UPC E1 with 2 Supps.
	RSS-Limited	UPC E1 with 5 Supps.
	RSS-14	Coupon Code
	RSS-Expanded	

*Note: the types enable / disable by default can be switched by scanning corresponding function barcodes in **Appendix Table 2**.*

A1.2 Transmit Code Type Character

Symbol Code ID Character
(0x02)

*None
(0x00)

Enable **Disable**

If this function enable, scanner will recognize code type when scanning a barcode.

A1.3 Enable / Disable Barcodes

Appendix Table 2

Type		Function Barcodes	Sample Barcodes
UPC-A	Enable	*Enable UPC-A	1 23456 78901 2
	Disable	Disable UPC-A	
UPC-E	Enable	*Enable UPC-E	0 123456 5
	Disable	Disable UPC-E	

UPC-E1	Enable	Enable UPC-E1	
	Disable	*Disable UPC-E1	
EAN-8	Enable	*Enable EAN-8	
	Disable	Disable EAN-8	
EAN-13	Enable	*Enable EAN-13	
	Disable	Disable EAN-13	
Bookland EAN	Enable	Enable Bookland EAN	

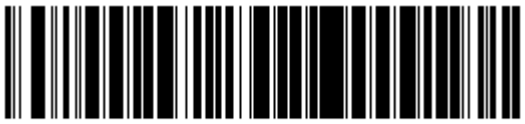
	Disable	*Disable Bookland EAN	
Code 128	Enable	*Enable Code 128	AB-ab-123
	Disable	Disable Code 128	
UCC/EAN 128	Enable	*Enable UCC/EAN-128	(12)34=TEC-IT
	Disable	Disable UCC/EAN-128	
ISBT 128	Enable	*Enable ISBT 128	
	Disable	Disable ISBT 128	

<table>
<tr><td rowspan="3">Code 39</td><td>Enable</td><td>*Enable Code 39</td><td rowspan="2">
AB$+%-12</td></tr>
<tr><td>Disable</td><td>Disable Code 39</td></tr>
<tr><td colspan="3">Scanning this barcode to enable for any length Code 39

Code 39 - Any Length</td></tr>
<tr><td rowspan="2">Trioptic Code 39</td><td>Enable</td><td>Enable Trioptic Code 39</td><td rowspan="2"></td></tr>
<tr><td>Disable</td><td>*Disable Trioptic Code 39</td></tr>
<tr><td>ASCII</td><td>Enable</td><td>Enable Code 39 Full ASCII</td><td>
AaB-12</td></tr>
</table>

<table>
<tr><td></td><td>Disable</td><td>
*Disable Code 39 Full ASCII</td><td>Trioptic Code 39 and Code 39 Full ASCII cannot be enabled simultaneously. If an error beep sounds when enabling Trioptic Code 39, disable Code 39 Full ASCII and try again.</td></tr>
<tr><td rowspan="3">Code 93</td><td>Enable</td><td>
Enable Code 93</td><td rowspan="2">
AB- /$+2%3</td></tr>
<tr><td>Disable</td><td>
*Disable Code 93</td></tr>
<tr><td colspan="3">Scanning this barcode to enable for any length Code 93

Code 93 - Any Length</td></tr>
<tr><td rowspan="2">Code 11</td><td>Enable</td><td>
Enable Code 11</td><td rowspan="2">
0123-456789</td></tr>
<tr><td>Disable</td><td>
*Disable Code 11</td></tr>
</table>

<table>
<tr><td></td><td colspan="3">Scanning this barcode to enable for any length Code 11
 
Code 11 - Any Length</td></tr>
<tr><td rowspan="3">Interleaved 2 of 5</td><td>Enable</td><td>
*Enable Interleaved 2 of 5</td><td rowspan="2">
1234567890</td></tr>
<tr><td>Disable</td><td>
Disable Interleaved 2 of 5</td></tr>
<tr><td colspan="3">Scanning this barcode to enable for any length I 2 of 5

I 2 of 5 - Any Length</td></tr>
<tr><td rowspan="2">Discrete 2 of 5</td><td>Enable</td><td>
Enable Discrete 2 of 5</td><td rowspan="2"></td></tr>
<tr><td>Disable</td><td>
*Disable Discrete 2 of 5</td></tr>
</table>

Scanning this barcode to enable for any length D 2 of 5

D 2 of 5 - Any Length

Chinese 2 of 5

Enable

Enable Chinese 2 of 5

Disable

*Disable Chinese 2 of 5

Codabar

Enable

Enable Codabar

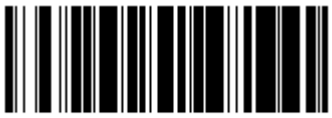
Disable

*Disable Codabar

Scanning this barcode to enable for any length Codabar

Codabar - Any Length

<table>
<tr><td rowspan="3">MSI</td><td>Enable</td><td>
Enable MSI</td><td rowspan="2">
0123456782</td></tr>
<tr><td>Disable</td><td>
*Disable MSI</td></tr>
<tr><td colspan="3">Scanning this barcode to enable for any length MSI

MSI - Any Length</td></tr>
<tr><td rowspan="2">RSS-14</td><td>Enable</td><td> 
Enable RSS-14</td><td rowspan="2"></td></tr>
<tr><td>Disable</td><td>
*Disable RSS-14</td></tr>
<tr><td>RSS-Limited</td><td>Enable</td><td>
Enable RSS-Limited</td><td></td></tr>
</table>

	Disable	 *Disable RSS-Limited	
RSS-Expanded	Enable	 Enable RSS-Expanded	
	Disable	 *Disable RSS-Expanded	